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

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

**Report submitted by China**



## **Implementation of the Treaty on the Non-Proliferation of Nuclear Weapons in the People's Republic of 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, the five nuclear-weapon States parties to the Treaty met in Beijing on 30 January 2019 and agreed to follow the common framework established in 2013 in submitting their national reports to the 2020 Review Conference of the Treaty. The Government of China is submitting the pertinent information using the common heading classifications in the framework used for drafting national reports. The framework covers the three pillars of the Treaty: nuclear disarmament, nuclear non-proliferation and peaceful uses of nuclear energy.

2. China is committed to the path of peaceful development and actively promotes the building of a community of shared future for humanity. It attaches great importance to the status of the Treaty as the cornerstone of international nuclear disarmament and non-proliferation and has made unremitting efforts to achieve the three major objectives of preventing the proliferation of nuclear weapons, advancing the process of nuclear disarmament and promoting the peaceful use of nuclear energy. China will continue to implement the new concept of common, comprehensive, cooperative and sustainable security through practical actions, firmly safeguard the authority, effectiveness and universality of the Treaty, and make due contributions to the maintenance of international peace and security.

3. In accordance with the applicable requirements of the 2000 and 2010 Review Conferences, the Government of the People's Republic of China hereby submits the following report on its implementation of the Treaty.

### **I. Reporting on national measures relating to nuclear disarmament**

4. China has shown maximum transparency in its nuclear strategy, maintained great restraint in the development of its nuclear force, and adopted an attitude of extreme caution regarding the use of nuclear weapons. Since the first day it came into possession of nuclear weapons, China has advocated their complete prohibition and thorough destruction, and has limited the size of its nuclear force to the minimum level required to maintain national security. China has consistently adhered to the policy of not being the first to use nuclear weapons at any time and under any circumstances, and has made a clear and unconditional commitment not to use or threaten to use nuclear weapons against non-nuclear-weapon States and nuclear-weapon-free zones. China will continue to do its part to contribute to the ultimate goal of building a nuclear-weapon-free world.

#### **A. National security policies, doctrines and activities concerning nuclear weapons**

5. "A nuclear war cannot be won and must never be fought." From the perspective of the future and destiny of humankind, this is an untouchable bottom line. There is no ultimate victor in nuclear war, only great disaster for humanity. China was compelled to develop nuclear weapons during a particular time in its history, in order to deal with the nuclear threat, break the nuclear monopoly and prevent nuclear war. It developed nuclear weapons not for the purpose of threatening other countries, but to defend itself and safeguard its national security. On the first day it came into

possession of nuclear weapons, the Government of China issued a solemn proposal to convene a summit of world leaders to discuss the complete prohibition and thorough destruction of nuclear weapons.

6. Committing to not being the first to use nuclear weapons can reduce the threat of nuclear weapons, reduce the risk of nuclear war and prevent the proliferation of nuclear weapons. It is an important step towards general and complete nuclear disarmament and the attainment of a nuclear-weapon-free world. China has always upheld its commitment not to be the first to use nuclear weapons at any time and under any circumstances, in itself a practical act of nuclear disarmament. Over the decades it has possessed nuclear weapons, China has unswervingly upheld this commitment, whether in the face of nuclear threats and blackmail during the cold war period or in the face of dramatic changes in the international security environment thereafter, and will not change in the future.

7. China unconditionally undertakes not to use or threaten to use nuclear weapons against non-nuclear-weapon States and nuclear-weapon-free zones. In April 1995, China issued a statement reiterating its unconditional provision of negative security assurances to all non-nuclear-weapon States and its commitment to offer them positive security assurances. In 2000, China and the other nuclear-weapon States issued a joint statement reaffirming their security-assurance commitments under United Nations Security Council resolution 984 (1995). At the request of Ukraine and Kazakhstan, the Government of China issued statements offering security assurances to those two countries in December 1994 and February 1995 respectively. In April 2015, China ratified the Protocol to the Treaty on a Nuclear-Weapon-Free Zone in Central Asia. China maintains that the international community should negotiate and conclude, as soon as possible, an international legal instrument providing unconditional negative security assurances to all non-nuclear-weapon States, and supports the start of substantive work in this regard by the Conference on Disarmament in Geneva as soon as possible.

8. China staunchly pursues a nuclear strategy of self-defence, whose basic mission is to ensure that the country is protected from foreign nuclear attacks. It has also established corresponding policies on the role and use of nuclear weapons, the size of its nuclear force, its nuclear-weapons alert status and nuclear-arms control. China has exercised great restraint in developing its nuclear force and has consistently maintained it at the lowest level needed for its national security. It has never compared its nuclear-weapons investment, quantity or scope with those of other countries. China takes no part in arms races of any kind, provides no nuclear umbrella for other countries and does not deploy nuclear weapons in other countries. Its nuclear weapons are exclusively strategic, and it takes an extremely cautious attitude towards the use of nuclear weapons.

9. Maintaining international and regional strategic balance and stability is conducive to reducing the risk of nuclear war, and China advocates joint efforts by nuclear-weapon States to that end. First comes advocacy of common security and definition of strategic stability objectives. In order effectively to reduce the risk of nuclear war, nuclear-weapon States should abandon the cold-war mentality and zero-sum thinking, renounce nuclear-deterrence policies centred on pre-emption, restrain the impulse to engage in a nuclear arms race, halt the development and deployment of global anti-missile systems, and reduce the role of nuclear weapons in their national security policies. Second is the continued enhancement of mutual trust and the establishment of a solid foundation for strategic stability. Nuclear-weapon States should strengthen dialogue on nuclear strategies and policies, treat each other's strategic intentions objectively, respect each other's security concerns, exercise appropriate control of disputes, prevent strategic misjudgments from triggering accidents and crises, and avoid competition among major powers becoming self-

fulfilling prophecies. Third is respect for rules and commitments and maintenance of the strategic stability framework. China encourages the United States of America and Russia to continue to resolve their differences through negotiation and consultation, strive to preserve the Intermediate-Range Nuclear Forces (INF) Treaty and push for the extension of the Treaty between the United States of America and the Russian Federation on Further Reduction and Limitation of Strategic Offensive Arms (START II). At the same time, the nuclear-weapon States should jointly maintain and strengthen the review process of the Treaty on the Non-Proliferation of Nuclear Weapons and uphold the principle of progressive nuclear disarmament. Fourth is strengthened communication and exchange and consolidation of strategic stability and consensus. The nuclear-weapon States should progressively discuss the content and key elements of strategic stability from the perspectives of strategic strength, policy orientation and strategic mutual trust, gradually building consensus and expanding the convergence of their interests.

## **B. Nuclear weapons, nuclear arms control (including nuclear disarmament) and verification**

10. China deters other countries from using or threatening to use nuclear weapons against it by building its strategic nuclear force in accordance with the principle of competence and effectiveness; adapting to developing trends in military science and technology; and ensuring its protection, rapid-reaction, penetration, destruction and precise-strike capabilities, the safety, reliability and effectiveness of its nuclear weapons, and its strategic-deterrence and nuclear-counter-attack capabilities. Its nuclear weapons modernization is entirely aimed at ensuring the safety, security, reliability and effectiveness of its nuclear weapons. The People's Liberation Army Rocket Force is currently the core force of the country's strategic deterrence, and is equipped with Dongfeng-series ballistic missiles.

11. China has reduced its nuclear weapons bases. It voluntarily closed its "816" military nuclear-material production base in Chongqing as early as the 1980s. Excavated deep in the mountains at a total cost of 746 million yuan, the base was 85 per cent completed when construction was halted, demonstrating the country's determination to take the initiative in restraining the development of nuclear force. In 1987, the Government of China also decided to cancel a nuclear-weapons development, testing and production base in Qinghai. Following an overall remodelling, the entire base was handed over to the local government for its use. The sites of both these bases are now open to visitors.

12. China has consistently attached great importance to the safety and effective control of nuclear weapons management and use. Since the day it came into possession of nuclear weapons, China has actively taken a series of practical and effective measures to ensure that this limited nuclear force remains absolutely safe and reliable. China has strict laws and regulations and reliable technical means to implement safety management throughout the entire process of nuclear weapons storage, transportation and training. In order to prevent unauthorized or accidental launching of nuclear missiles, China has adopted many special technical-safety measures in the area of equipment technology, in addition to clearly stipulated regulations in its legal and readiness-level regimes. China values building a culture of nuclear safety in its nuclear-related departments, institutions and military units, and constantly strengthens the nuclear-safety awareness and sense of responsibility of its nuclear-related personnel. No safety or security problems involving nuclear weapons have ever occurred in China.

13. The command of the nuclear force in China is highly centralized. Unit operations must be carried out in the strictest and most accurate compliance with the orders of the Central Military Commission. In peacetime, the nuclear force is maintained at a moderate state of alert. In accordance with the principles of peacetime-wartime coordination, constant readiness and being prepared to fight at any time, China strengthens its combat-readiness support to ensure effective response to war threats and emergencies. If the country faced a nuclear threat, the alert status would be raised and preparations for nuclear counter-attack undertaken under the orders of the Central Military Commission to deter the enemy from using nuclear weapons against China. If the country were subjected to nuclear attack, it would mount a resolute counter-attack against the enemy.

14. An active participant in international nuclear arms-control efforts, China has consistently advocated the complete prohibition and thorough destruction of nuclear weapons. All nuclear-weapon States should fulfil in good faith their obligations under article VI of the Treaty and publicly commit to renouncing permanent possession of nuclear weapons. Nuclear disarmament should be a just and reasonable process of gradual and balanced reduction. States with the largest nuclear arsenals bear special and overarching responsibilities with regard to nuclear disarmament. They should continue to drastically reduce their nuclear weapons in a verifiable, irreversible and legally binding manner so as to create conditions for the ultimate realization of complete and comprehensive nuclear disarmament. When conditions are ripe, all nuclear-weapon States should join the multilateral nuclear disarmament negotiation process.

15. Over the years, China has voted in favour of important nuclear disarmament resolutions adopted by the General Assembly, such as those entitled “Towards a nuclear-weapon-free world: accelerating the implementation of nuclear disarmament commitments”, “Nuclear disarmament”, “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”.

16. China has actively promoted the conclusion of multilateral treaties on non-first-use of nuclear weapons by nuclear-weapon States. In January 1994, it submitted a draft treaty on non-first-use of nuclear weapons to the four other nuclear-weapon States, and actively sought a commitment to mutual non-first-use of nuclear weapons with other nuclear-weapon States on a bilateral or multilateral basis.

17. China supports the conclusion of a comprehensive and balanced programme of work by the Conference on Disarmament in Geneva, so that the Conference can undertake substantive work on such important issues as nuclear disarmament, security assurances for non-nuclear-weapon States, a treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices, and the prevention of an arms race in outer space.

18. China firmly supports the purposes and objectives of the Comprehensive Nuclear-Test-Ban Treaty, and has made important progress in domestic preparations for its implementation. China has consistently adhered to a moratorium on nuclear testing, supported the early entry into force of that Treaty and all international efforts to promote its entry into force, participated in all previous conferences to promote its entry into force, and actively supported the relevant resolutions of the Security Council and the First Committee of the General Assembly. In January 2018, the Chinese Minister for Foreign Affairs, Wang Yi, reiterated the firm commitment of China to that Treaty in a meeting with the visiting Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization in Beijing. China has paid its assessed contributions to the Preparatory

Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization in full and on time.

19. In recent years, nuclear test-ban monitoring stations in China have been accepted for certification in significant numbers, becoming a highlight of the treaty verification mechanism formulation process. China has undertaken the construction of 11 monitoring stations and one radionuclide laboratory, all of which have been built so far except for an infrasound station in Beijing, selection of the site for which is still in process. Since December 2016, radionuclide stations in Lanzhou, Beijing and Guangzhou, and basic seismic stations in Hailar and Lanzhou, have been successively accepted for certification. For stations in China to be accepted for certification in such significant numbers constitutes a milestone, and reflects our firm support for the construction of the treaty verification mechanism.

20. China actively supports and is deeply involved in the work of the Provisional Technical Secretariat of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization, participates in all meetings of the Preparatory Commission and subordinate working groups, and participates fully in the negotiation of guidance documents such as those concerning the International Monitoring System, the International Data Centre and the on-site inspection operation manual. It actively takes part in various international activities organized or supported by the Provisional Technical Secretariat aimed at improving the monitoring capacity of the International Monitoring System and promoting the ability of Treaty signatories to comply with the Comprehensive Nuclear-Test-Ban Treaty. Such activities include developing and improving mobile field-test equipment for rapid argon and xenon inert-gas measurement, and discussing and evaluating the road map for the progressive commissioning of the International Data Centre, as well as appointing experts as task leaders in the Preparatory Commission Verification Working Group and actively assigning personnel for training as acting inspectors in the third round of field inspections. Through these actions, China has contributed to the construction of the treaty verification mechanism and to the maintenance of the gravity and impartiality of the treaty.

21. China maintains good cooperation with the Provisional Technical Secretariat. The two sides jointly convened the fourth East Asia Regional National Data Centre Workshop in Beijing in May 2016, and in October 2016 the two sides cooperated in hosting a seminar for scientists in Beijing on banning nuclear tests. The radionuclide laboratory took part in the international comparison of samples and related technical seminars organized by the Provisional Technical Secretariat, which actively promoted the certification process for the laboratory.

22. Following the nuclear tests carried out by the Democratic People's Republic of Korea on 6 January 2016, 9 September 2016 and 3 September 2017, the Lanzhou and Hailar basic seismic stations and the Beijing, Guangzhou and Lanzhou radionuclide stations in China provided timely monitoring data to the International Data Centre.

23. China has consistently taken a positive attitude towards the proposed treaty banning the production of fissile material for nuclear weapons or other nuclear explosive devices (a "fissile material cut-off treaty" or FMCT). It believes that negotiating and concluding such a treaty in the Conference on Disarmament on the basis of the Shannon report (CD/1299) and with the participation of all parties involved will help promote the process of nuclear disarmament, prevent the proliferation of nuclear weapons and maintain international peace and security. As the sole multilateral disarmament negotiating body, the Conference is the only appropriate place to negotiate a fissile material cut-off treaty. China supports the Conference in establishing a comprehensive and balanced programme of work in

order to allow substantive work, including negotiations on a fissile material cut-off treaty, to be carried out immediately.

24. China has actively participated in the useful discussions held by the relevant subsidiary bodies of the Conference on Disarmament on issues related to a fissile material cut-off treaty, and believes that this will also lay a foundation for the revitalization of the future work of the Conference. China has constructively participated in the United Nations preparatory group of high-level experts on such a treaty, and has contributed to promoting the work of that group as mandated by applicable resolutions and to reaching consensus on a report. The group of experts has completed its mission, and related discussions should return to the Conference track, focusing on pertinent technical issues through the establishment of subsidiary bodies.

25. China attaches importance to and actively conducts research on nuclear arms control verification. It has constructively participated in the work of the United Nations Group of Governmental Experts on Nuclear Disarmament Verification established pursuant to General Assembly resolution 71/67. It supports the Group's work in strict compliance with the pertinent General Assembly resolutions and has contributed to the consensus briefing of the Group. China believes that full and effective nuclear disarmament verification measures are an important technical guarantee for the eventual complete prohibition and thorough destruction of nuclear weapons, and are of great significance for ensuring the effective implementation of nuclear disarmament treaties, building mutual trust among the parties to them and enhancing their reliability. At the same time, it should be noted that nuclear disarmament verification is sensitive and complex, and many factors need to be considered, especially in the context of specific nuclear disarmament treaties.

### **C. Transparency and confidence-building measures**

26. China has always believed that transparency of intentions and policies is of the most practical significance. China firmly follows a path of peaceful development, pursues a nuclear strategy of self-defence, will not be the first to use nuclear weapons, and will not threaten any other country with its nuclear weapons. This is the most practical transparency. Nuclear transparency should follow the important principle of "undiminished security of all countries", take full account of the security environments faced by all countries, and be implemented voluntarily by all countries in accordance with their national conditions. Therefore, countries must take full account of their differences in nuclear strategy and power, and accept existing differences in transparency and focus. In line with the above principles, China will continue to take necessary measures in nuclear transparency, including maintaining nuclear policy dialogue with the other four nuclear powers.

27. China published three white papers on arms control, in 1995, 2003 and 2005 respectively, entitled "China: Arms Control and Disarmament", "China's Non-Proliferation Policies and Measures" and "China's Arms Control, Disarmament and Non-Proliferation Efforts". From 1998 to 2010, it issued seven white papers on national defence; in 2013, it issued a white paper entitled "The Diversified Employment of China's Armed Forces"; and in 2015, it issued a white paper entitled "China's Military Strategy". In all these documents, China provided a clear exposition of its nuclear strategy, the role of its nuclear weapons, its policy regarding their use, the development and the command and control of its nuclear force, and the alert status of its nuclear weapons.

28. China has taken a series of confidence-building measures. It actively seeks to ensure that nuclear-weapon States do not aim their nuclear weapons at each other. In

September 1994, China and the Russian Federation issued a joint statement that they would not aim their strategic nuclear weapons at each other. In June 1998, the Heads of State of China and the United States declared that they would not aim their countries' strategic nuclear weapons at each other. In May 2000, the five nuclear-weapon States, namely China, France, Russia, the United Kingdom and the United States, declared in a joint statement that their nuclear weapons would not be aimed 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 an agreement on notification of ballistic-missile and space-vehicle launches, which has been functioning well since then. In June 2016, the Heads of State of China and Russia issued a joint declaration on strengthening global strategic stability in Beijing. Under the framework of bilateral strategic dialogue, China and the United States maintain communication and exchanges on strategic issues such as nuclear policy.

29. China attaches great importance to the cooperation mechanism among the five nuclear-weapon States and maintains dialogue and consultation with the other four nuclear-weapon States with regard to confidence-building measures and the implementation of the Non-Proliferation Treaty. China took over as coordinator of the cooperation mechanism in July 2018, and has worked hard to promote the revitalization of cooperation among the five nuclear-weapon States. It successfully convened the annual conference of the five nuclear-weapon States in Beijing on 30 January 2019. China also hosted public activities involving representatives of the five nuclear-weapon States and representatives of academic and news organizations to promote mutual understanding and trust. In addition, in its capacity as coordinator, China has taken the lead in organizing dialogues between the five nuclear powers and the Non-Proliferation and Disarmament Initiative.

30. The 2019 Beijing conference of the five nuclear powers focused on strengthening coordination among the five nuclear powers and safeguarding the Treaty regime. Following frank and in-depth exchanges on nuclear policy and strategy, nuclear disarmament and nuclear non-proliferation, consensus was achieved on a number of important issues. Firstly, the five nuclear-weapon States committed to sharing international peace and security responsibilities. All five nuclear-weapon States recognized that the current international security environment is facing severe challenges, and maintaining good relations among major powers is crucial to solving global strategic problems. They agreed to treat each other's strategic intentions objectively, strengthen nuclear policy and strategy exchanges, enhance strategic mutual trust and maintain common security, and make every effort to prevent nuclear risks arising from misunderstandings and misjudgments. The five nuclear powers also pledged to maintain the existing international arms-control system and abide by all international arms-control agreements, and reiterated their commitment to non-nuclear security, including active and negative security.

31. Secondly, the five nuclear powers committed to jointly upholding the Treaty regime. The five nuclear-weapon States emphasized that the Treaty is the cornerstone of the international nuclear non-proliferation system and an important component of the international security architecture. They committed to the full and complete implementation of the Treaty and to promoting its universality. The five nuclear-weapon States vowed to follow the principle of "undiminished security for all countries", promote greater progress in nuclear disarmament and achieve the goal of a nuclear-weapon-free world step by step. The five nuclear-weapon States were of the view that the Treaty on the Prohibition of Nuclear Weapons deviated from and undermined the Treaty on the Non-Proliferation of Nuclear Weapons, and reiterated their unanimous opposition. The five nuclear-weapon States affirmed that they would resolve the issue of nuclear non-proliferation through political and diplomatic means,



promote international cooperation in the peaceful use of nuclear energy and support the efforts of countries in South-East Asia and the Middle East to establish nuclear-weapon-free zones. The five nuclear powers also agreed to submit their national reports to the 2020 Review Conference to jointly promote the success of that Conference.

32. Thirdly, the five nuclear-weapon States pledged to continue to use the platform for coordination among themselves to maintain dialogue and cooperation. The current international security situation has evolved in complex and profound ways, with interaction among the major powers being closely bound up with the international security environment, trends in the international order and the confidence of the international community. The five nuclear powers agreed to maintain strategic dialogue, strengthen nuclear policy and strategy exchanges, and strengthen coordination in the review process of the Non-Proliferation Treaty. All parties supported China to lead the second phase of the working group on nuclear terminology of the five nuclear powers, and welcomed their next formal meeting to be hosted by the United Kingdom in 2020. The five nuclear powers actively promoted open and constructive dialogue in the international community.

33. As permanent members of the Security Council and nuclear-weapon States recognized by the Treaty, the five nuclear-weapon States conducted in-depth exchanges in a spirit of mutual respect, honesty and pragmatism, achieved consensus on a number of issues and made clear the direction of their cooperation, reflecting the positive attitude of the major powers toward coordinating and cooperating in meeting international security challenges and enhancing the confidence of the international community in the international security environment. The Conference will help promote consensus among the five nuclear powers in the field of strategic security, replace big-power competition with big-power coordination, and replace zero-sum thinking with win-win cooperation, thus making positive contributions to promoting world peace and stability.

34. On 31 January 2019, the five nuclear powers held a dialogue meeting in Beijing with international academic institutions, the media and embassy officials of some non-nuclear-weapon States in China, briefing them on the Beijing Conference. In addition, China briefed all parties at the Conference on Disarmament regarding the Beijing Conference of the five nuclear powers.

35. The five nuclear-weapon States set up a working group on nuclear terminology in 2011 to discuss key terms and definitions in the fields of nuclear disarmament, nuclear non-proliferation and peaceful uses of nuclear energy, which were discussed in depth under the leadership and coordination of China. The group officially issued the “P5 Glossary of Key Nuclear Terms” in New York during the ninth Review Conference in 2015. One consensus of the January 2019 Beijing conference of the five nuclear powers was that all parties would support China to continue to lead the second phase of the work of the working group on nuclear terminology. In February 2019, China held the first meeting of that second phase in Beijing; a list of nuclear terms was discussed, and a work plan and the division of tasks were clearly defined. All parties are committed to submitting new results to the 2020 Review Conference.

36. The discussion of nuclear terms by the five nuclear powers is by no means simply a technical issue. Its significance lies in enhancing consensus, eliminating misunderstandings, increasing mutual trust and preventing misjudgments through discussion. Therefore, it is also a transparent measure of nuclear policy and an important practical measure for the five nuclear-weapon States to implement Treaty review outcomes. It fully reflects the political will of the five nuclear-weapon States to promote the Treaty review process and fulfil their treaty obligations. As a leading

country, China attaches great importance to the work of the working group on nuclear terminology and will make unremitting efforts to achieve those objectives.

#### **D. Other related issues**

37. The anti-missile issue is a factor in global strategic balance and stability, and is closely tied to the process of nuclear disarmament. China believes in upholding a common, comprehensive, cooperative and sustainable security concept, abandoning the non-constructive approach of developing and deploying a global anti-missile system based on the so-called “missile threat”, and solving the problem of missile proliferation through political and diplomatic means.

38. The INF Treaty is of important historical and practical significance for easing international relations, promoting the process of nuclear disarmament, and even maintaining global strategic balance and stability. China hopes that the countries concerned will effectively shoulder their primary and special responsibilities with regard to the issue of nuclear disarmament, resolve their differences through dialogue and return to the correct track of complying with the INF Treaty. China opposes the multilateralization of the INF Treaty and unswervingly pursues a defensive national-defence policy. Its development of intermediate-range missiles further confirms the restraint it has displayed with regard to nuclear-weapons development overall. All of its land-based medium- and short-range missiles are deployed within its own borders for defensive purposes and pose no threat to any country. It is therefore unreasonable to ask China to accede to the INF Treaty on the basis of an exaggerated “China threat”.

39. China actively promotes the multilateral process of preventing the weaponization of outer space and an arms race in outer space. In February 2008, China and Russia jointly submitted to the Conference on Disarmament a draft treaty on the prevention of the placement of weapons in outer space and of the threat or use of force against outer space objects (CD/1839), and actively promoted discussions in the Conference on this issue. In June 2014, China and Russia jointly submitted an updated version of the draft to the Conference (CD/1985). In 2017, China and Russia promoted the adoption of a General Assembly resolution to establish a group of governmental experts on the prevention of an arms race in outer space, to discuss the substantive elements of an international legal instrument on preventing the weaponization of outer space and preparing for the early start of negotiations in the Conference; China deeply regrets that individual countries have exclusively blocked the adoption of the report of the group of experts. However, China supports transparency and confidence-building measures in outer space, and as a co-sponsor of pertinent General Assembly resolutions, it made positive contributions to the report of the United Nations Group of Governmental Experts on Transparency and Confidence-building Measures in Outer Space in 2013. China, Russia and the United States have jointly proposed that the review cycle of the Disarmament Commission begin in 2018 to increase focus on the issue of outer space, put forward suggestions on transparency and confidence-building measures to help achieve the goal of preventing an arms race in outer space, and actively promote progress in related work.

## **II. Reporting on national measures relating to non-proliferation**

40. China firmly opposes the proliferation of nuclear weapons and advocates the full, faithful and balanced implementation of all obligations under the Non-Proliferation Treaty and the strengthening of the authority and effectiveness of the international nuclear non-proliferation system based on the Treaty. China has

always strictly fulfilled its international nuclear non-proliferation obligations, fully and completely implemented pertinent Security Council resolutions, and actively participated in international non-proliferation cooperation. Over the years, China has taken a highly responsible approach to gradually establishing a sound non-proliferation and export control system. To ensure the effective implementation of related laws and regulations, the Government of China has adopted strict measures in both domestic management and export control and has made important contributions to the maintenance of the international nuclear non-proliferation system. China actively participates in the process of political settlement of regional hot nuclear issues and plays its due role in promoting international and regional peace and security.

## **A. Safeguards**

41. The implementation of safeguards is an important function of the International Atomic Energy Agency, and safeguards are of great significance in preventing the proliferation of nuclear weapons. China values the role of safeguards in ensuring the peaceful use of nuclear energy and supports the strengthening of the efficiency and effectiveness of institutional safeguards. At the same time, China believes that the safeguard mechanism should be premised on ensuring fairness and objectivity.

42. China joined the International Atomic Energy Agency in 1984 and has made a clear commitment to fulfil its safeguards obligations under the Statute of the Agency. In 1985, China announced that it would voluntarily submit some of its civilian nuclear facilities to Agency safeguards. In 1988, China signed an agreement with the Agency on the implementation of safeguards in China. In December 1998, China signed an additional protocol on strengthening Agency safeguards; upon formally completing the domestic legal procedures for its entry into force in March 2002, China became the first nuclear-weapon State to implement an additional protocol.

43. China actively supports and cooperates with the implementation of Agency safeguards. At present, China has submitted 26 candidate nuclear facilities for safeguards, including pressurized water reactors, heavy-water reactors, research reactors, high-temperature gas-cooled reactors, uranium enrichment plants, nuclear fuel-element production lines and other facilities. In 2017, after the Agency chose to implement safeguards for a high-temperature gas-cooled reactor demonstration project under construction, China and the Agency worked together to research and develop a safeguard implementation scheme for this new commercial reactor type, providing a powerful impetus to the technical upgrading of the safeguards regime of the Agency.

44. In 2007, China joined the Nuclear Safeguards Member State Support Programme of the Agency, formally undertaking research and development work on the means and methods of safeguards verification for the Agency, recommending experts to serve the Agency on a no-fee basis, supporting the Agency to carry out research and development projects on safeguards concepts, and completing the Agency's nuclear material analysis on time and efficiently.

45. China attaches great importance to the development of professional human resources in the field of safeguards and supervision. The China Atomic Energy Authority and the International Atomic Energy Agency have established a joint training centre on nuclear safeguards and nuclear security, providing specialized training activities in such fields as safeguards verification, inventory and control of nuclear materials, and nuclear export control. In 2018, the Authority organized a conference on nuclear safeguards in which experts actively participated and submitted academic reports. In April 2019, it also organized national academic seminars on

nuclear safeguards with a view to guaranteeing and improving human-resource reserves and their technological levels.

## **B. Export controls**

46. China exercises strict control and management of its nuclear exports, and has adopted three clear principles in this regard: such exports are for peaceful use only, must comply with Agency safeguards, and may not be transferred to any third party without the prior consent of China.

47. In 1991, China announced that it would inform the International Atomic Energy Agency, on a continuous basis, of any export to or import from a non-nuclear-weapon State of nuclear material exceeding one effective kilogram. In July 1993, China formally undertook to inform the Agency, on a voluntary basis, of the import and export of all nuclear materials, nuclear equipment and related non-nuclear materials.

48. In May 1996, China undertook not to provide assistance, including non-nuclear exports, personnel exchanges and technical cooperation, to non-nuclear-weapon States whose nuclear facilities were not subject to Agency safeguards.

49. In line with the principle of the rule of law, the Government of China has continuously endeavoured to improve and strengthen the legal system of nuclear export control and intensified efforts to ensure the effective enforcement of its non-proliferation policies. Since the mid-1990s, China has gradually put in place a comprehensive system of laws and regulations covering the export of sensitive nuclear, missile, biological and chemical items and technologies, as well as of all military materiel.

50. In 1987, the Government of China promulgated the Regulations of the People's Republic of China on the Control of Nuclear Material, implementing a nuclear materials licensing system and clearly designating the departments responsible for nuclear material supervision and management and the scope of their responsibilities, along with measures for controlling nuclear materials, the application, review and issuance procedures for nuclear material licences, accounting management and physical protection of nuclear materials, and related incentives and penalties.

51. In September 1997, China promulgated the Regulations of the People's Republic of China on Nuclear Export Control, stipulating that no assistance may be provided to nuclear facilities that have not complied with Agency safeguards; that nuclear export operations are to be the exclusive purview of entities designated by the State Council of China; and that the central Government is to implement a licensing system for nuclear exports. The Regulations provide for a stricter nuclear export review system, impose severe penalties for violations, and establish comprehensive and detailed control lists.

52. In June 1998, China promulgated the Regulations of the People's Republic of China on Export Control of Nuclear Dual-Use Items and Related Technologies, instituting strict controls on the export of nuclear dual-use goods and related technologies and a licensing management system for related exports, and also establishing a registration system for export operators, procedures for export approval and penalties for violations.

53. The amended Criminal Law of the People's Republic of China, adopted in December 2001, criminalizes and imposes criminal penalties for the illegal manufacture, trafficking and transportation of radioactive substances. In February 2002, the Government of China promulgated the Regulations of the People's Republic of China on Supervision and Administration of Nuclear Import and Export and Safeguards for Foreign Nuclear Cooperation.

54. China completed the revision of the Regulations of the People's Republic of China on Nuclear Export Control in November 2006, and of the Regulations of the People's Republic of China on Export Control of Nuclear Dual-Use Items and Related Technologies in January 2007. Revisions of the Nuclear Export Control List and the Nuclear Dual-Use Items and Related Technologies Export Control List were completed in 2015 and 2018.

55. In April 2012, in order to strengthen nuclear import and export regulations, China enacted administrative measures for Government nuclear-import commitments, and the China Atomic Energy Authority and the United States National Nuclear Security Administration jointly published a technical guidance document for nuclear export control lists. In 2013, the Authority published a handbook on the administration of government commitments regarding nuclear imports. These measures have played a positive role in raising the level of nuclear expertise of Chinese personnel involved in nuclear import and export and in strengthening their enforcement of nuclear export controls.

56. At present, the Chinese nuclear-export control regime has adopted the prevailing international export business registration system, end-user and end-use certification, and licensing management system, along with the approval principles, inventory control methods and comprehensive control principles that are the fundamental starting point for preventing the proliferation of nuclear weapons, and has thereby achieved integration with international practices.

57. China values the important role played by existing multinational export-control mechanisms in the field of non-proliferation, especially in preventing the proliferation of nuclear weapons. China joined the Zangger Committee and the Nuclear Suppliers Group in 1997 and 2004 respectively, and has maintained contacts and exchanges with the Missile Technology Control Regime. The Chinese Nuclear Export Control List and Nuclear Dual-Use Items and Related Technologies Export Control List cover all items and technologies in the control lists of the Zangger Committee and the Nuclear Suppliers Group. The control list associated with the Regulations of the People's Republic of China on Export Control of Missiles and Related Items and Technologies is basically consistent with the Missile Technology Control Regime Annex.

58. As a member of the Nuclear Suppliers Group, China actively participates in the pertinent work of the Group and resolutely upholds the effectiveness, integrity and authority of the international nuclear non-proliferation system. The Chinese delegation actively participates in the plenary meetings of the Group, as well as the informal meetings of its Consultative Group and the meetings of its Technical Experts Group, with a view to dealing constructively with the issue of States not parties to the Non-Proliferation Treaty joining the Nuclear Suppliers Group. Since 2016, China has actively participated in discussions on related issues under the topic of technical, legal and political aspects of the participation of States not parties to the Treaty in the Nuclear Suppliers Group, as mandated by the plenary.

### **C. Nuclear security**

59. With the goal of building a world of lasting peace and universal security, the Government of China actively practises a rational, coordinated and progressive concept of nuclear security. As it continues to strengthen its nuclear security capacity-building, policy involvement and sense of national responsibility, China actively pursues international cooperation in nuclear security and promotes the establishment of a fair, cooperative and mutually beneficial international nuclear security system.

60. The Government of China has actively acceded to the conventions related to nuclear security and has rigorously fulfilled its international nuclear security obligations. In 1989, it acceded to the Convention on the Physical Protection of Nuclear Material, and ratified the amended Convention in 2008, further improving the national nuclear security system in accordance with the requirements of the Convention. China participated in the formulation of the International Convention for the Suppression of Acts of Nuclear Terrorism and completed the domestic ratification process for that Convention in August 2010. China strictly complies with pertinent United Nations Security Council resolutions and earnestly works to prevent non-State entities from acquiring sensitive nuclear materials. China also actively supports and participates in the efforts of the international community to strengthen the management of radioactive sources and supports the International Atomic Energy Agency Code of Conduct on the Safety and Security of Radioactive Sources.

61. China emphasizes its national responsibility for nuclear security and has established a national nuclear security system that is compatible with the development of the Chinese nuclear industry. The Regulations of the People's Republic of China on the Control of Nuclear Material were formulated and promulgated in 1987, the Rules for the Implementation of the Regulations of the People's Republic of China on the Control of Nuclear Material were implemented on 25 September 1990 and the Regulations on Physical Protection of International Transport of Nuclear Material were promulgated by the China Atomic Energy Authority in 1994. In 1997, the Regulations on Safety and Security of Nuclear Power Stations were promulgated, and seven guidelines were issued in 2013, including the Contents and Requirements for the Compilation of Application Documents for Nuclear Material Licences and the Control of Access and Entry to Nuclear Facilities. The National Security Law was promulgated and implemented in 2015 and included a clear call for strengthening the security of nuclear facilities, materials and activities. The Anti-Terrorism Law and the Nuclear Safety Law came into force in 2016 and 2018 respectively, while the Regulations on Nuclear Safety are currently being formulated. The implementation of these regulations and technical guidelines provides a strong guarantee for improving the nuclear security capability of China.

62. China vigorously promotes nuclear security capacity-building, continuously increasing investment in upgrading and renovating the physical protection systems of older nuclear facilities, constructing security systems for new nuclear facilities in strict accordance with the latest international standards, keeping records of nuclear material and tackling key technical issues of nuclear security, and organizing combat drills for verification and security. The State Nuclear Security Technology Center has been set up to strengthen nuclear-security team-building, training nearly 1,000 people annually for operating units of nuclear facilities.

63. China has actively reduced the use of sensitive nuclear materials and has completed the decommissioning of two domestic research microreactors and a low-enrichment retrofit project for a research microreactor. China values international cooperation in this field and is willing to provide countries in need with whatever such assistance is within its capabilities.

64. China has increased its investment in nuclear security and achieved positive results. In 2017, the International Atomic Energy Agency was invited to carry out an International Physical Protection Advisory Service (IPPAS) review in China. Using the latest international concepts, highest standards and best practices, an expert group from the Agency conducted a systematic and in-depth independent third-party assessment of the Chinese nuclear-security regulatory framework, regulatory system and physical protection system for nuclear facilities. The expert group fully affirmed the achievements of China in government nuclear-security regulation and capacity-

building and listed a series of best practices and experiences that could be extended to other member States.

65. China has actively participated in the nuclear-security summit process and has made important contributions to consensus-building on nuclear security in the international community. Chinese leaders have attended all four summit meetings on nuclear security. At the 2014 Nuclear Security Summit at the Hague and the 2016 Nuclear Security Summit in Washington, President Xi Jinping put forward the concept of nuclear security based on the principles of rationality, coordination and progress, emphasizing development and security, rights and obligations, autonomy and cooperation, governing goals and fundamental issues, and advocated the construction of a fair, cooperative and win-win international nuclear security regime. He also proposed five practical cooperation initiatives to promote international cooperation in nuclear security along with efforts to build a community of common destiny for nuclear security.

66. China has taken active measures to implement the outcomes of the Nuclear Security Summits, is deeply involved in international nuclear-security cooperation, and attaches importance to nuclear-security capacity-building. In cooperation with the United States, China established the Center of Excellence on Nuclear Security in March 2016. Boasting the equipment and technological capacity to carry out nuclear materials analysis, nuclear-security equipment testing and response-capacity drills in conformity with the highest international standards, it is the largest-scale, most comprehensively equipped and most technologically advanced nuclear-security exchange and training centre in the Asia-Pacific region and even the world. Since its establishment two years ago, the Center has conducted numerous nuclear-security exchanges and training sessions for personnel from China and other countries in the region. China has also severely cracked down on illicit trafficking in nuclear materials, continuously strengthened its inspection and detection capabilities at ports of entry, established the China Customs Radiation Detection Training Center in cooperation with the United States, and carried out many cooperation programmes with Russia, Kazakhstan and other countries.

67. China has actively participated in the work of the Nuclear Security Contact Group and has served as the lead country for Group capacity-building and cooperation at the regional level. In April 2018, China and the United States jointly held a workshop on nuclear security capacity-building and cooperation in Beijing, with the aim of building a platform for exchange among all parties, sharing best practices and exploring practical ways to cooperate. China will continue to play a leading role in Group capacity-building and cooperation activities in the region, advancing the “China Plan” and making “Chinese Contributions” for strengthening nuclear security capacity-building and promoting international cooperation in capacity-building.

68. As a founding partner of the Global Initiative to Combat Nuclear Terrorism, China supports the unique role of the Initiative in combating nuclear terrorism and will continue to participate in all programmes under the Initiative. In October 2018, China and the Initiative held a joint seminar in Beijing on combating nuclear terrorism and nuclear-emergency response at large public events. Through exchanges, mutual learning and desktop exercises, all parties gained a better understanding of related tasks. China will continue to organize activities using such platforms as the Center of Excellence on Nuclear Security and the China Customs Radiation Detection Training Center to help partner countries improve their anti-nuclear-terrorism capabilities.

69. China actively promotes bilateral nuclear security cooperation. In September 2015, the Heads of State of China and the United States announced the establishment of an annual nuclear-security dialogue mechanism, under which three dialogues have been held to date. In March 2016, the Heads of State of China and the United States

issued the United States-China Joint Statement on Nuclear Security Cooperation. The two countries held their first and second consultations on combating nuclear smuggling in October 2016 and November 2017 respectively, and jointly organized, with the Center of Excellence on Nuclear Security, a regional seminar on combating nuclear smuggling for Central Asian countries and Mongolia in July 2018. China has also actively explored nuclear-security exchanges and cooperation with other countries, and held its first nuclear-security dialogue with Russia in February 2018.

70. China actively provides nuclear-security assistance to developing countries. In each of the past few years, China has held training courses and seminars in China on a variety of topics in the nuclear-security field in cooperation with the International Atomic Energy Agency and provides countries in the region with whatever assistance it is capable of through technical clarification and personnel training. It has contributed to the Agency's Nuclear Security Fund for many consecutive years, for building the nuclear security capacity of the countries in the Asia-Pacific region, and donates its own independently developed nuclear security equipment to the Agency.

#### **D. Nuclear-weapon-free zones**

71. China believes that the establishment of nuclear-weapon-free zones is of great significance for promoting nuclear disarmament, preventing nuclear proliferation and promoting regional and world peace and security. China has consistently supported the establishment of nuclear-weapon-free zones by non-nuclear-weapon States on the basis of voluntary consultation and voluntary agreements in accordance with the actual situation in the region, and abides by its unconditional commitment not to use or threaten to use nuclear weapons against non-nuclear-weapon States and nuclear-weapon-free zones.

72. China has signed and ratified protocols to all treaties on nuclear-weapon-free zones that have been opened 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, Additional Protocols I and II to the African Nuclear-Weapon-Free Zone Treaty and the protocols to the Treaty on a Nuclear-Weapon-Free Zone in Central Asia. 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. In February 2017, China sent a delegation to participate in the celebration of the fiftieth anniversary of the opening for signature of the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean, reiterating that China will abide by its commitments and strictly fulfil its related obligations.

74. China has consistently firmly supported the establishment of a nuclear-weapon-free zone in Central Asia and completed the ratification and deposit of the protocols to the Treaty on a Nuclear-Weapon-Free Zone in Central Asia in April 2015. China is willing to deepen cooperation on this issue with the countries concerned, jointly safeguard the purposes and objectives of the Treaty and its protocols, and promote peace and security in Central Asia and the world.

75. China supported the efforts of the Association of Southeast Asian Nations (ASEAN) to establish a nuclear-weapon-free zone in South-East Asia and has played a constructive role in promoting agreement between the Association and the five nuclear-weapon States on the protocol to the Treaty on the Southeast Asia Nuclear Weapon-Free Zone. At present, China and the Association have resolved all remaining



issues regarding the protocol to the Treaty. At the same time, China actively promotes the resumption of consultations between the five nuclear-weapon States and the Association, and seeks an early signing of the protocol. At their conference in Beijing on 30 January 2019, the five nuclear powers agreed that China would take the lead in communicating with the Association and resume consultations on the protocol. China is actively coordinating with the rotating chair of the Association and the parties concerned in this regard and striving for new progress as soon as possible.

76. China supports the establishment of a zone free of weapons of mass destruction in the Middle East and fully understands the legitimate concerns of Arab countries in this regard. In the current environment, the establishment of such a zone in the Middle East would be conducive to preventing the proliferation of such weapons, easing tensions in the Middle East and enhancing regional and world peace and security. China voted in favour of a draft resolution submitted to the General Assembly in 2018 entitled “Convening a conference on the establishment of a Middle East zone free of nuclear weapons and other weapons of mass destruction”, supporting progress toward the successful convening of such a conference and making positive efforts to that end. China calls on all parties concerned to strengthen diplomatic coordination and take pragmatic measures to reach an agreement as soon as possible on the establishment of a zone free of weapons of mass destruction in the Middle East and stands ready to continue to make positive contributions to that end.

77. China respects the nuclear-weapon-free status of Mongolia and supported related resolutions adopted at previous sessions of the General Assembly. In 2000, China issued a joint statement with the four other nuclear-weapon States pledging to provide Mongolia with the security assurances for non-nuclear-weapon States. In 2012, China and the four other nuclear-weapon States reiterated their support for the nuclear-weapon-free status of Mongolia and the security assurances for Mongolia. China is willing to continue to work with all parties to jointly safeguard the nuclear-weapon-free status of Mongolia.

## **E. Compliance and other related issues**

78. China has been strictly fulfilling its international non-proliferation obligations and responsibilities in related fields. It abides by the regulations and resolutions on compliance with non-proliferation obligations adopted by the international entities concerned, such as the International Atomic Energy Agency and the United Nations Security Council.

79. China respects the role of the Non-Proliferation Treaty as the cornerstone of the international nuclear non-proliferation regime, and calls upon States that have not yet acceded to the Treaty to do so as non-nuclear-weapon States as soon as possible. It also supports the efforts of the international community to refine measures for handling withdrawal from the Treaty and appropriately raise the threshold for such withdrawal.

## **F. Other contributions to non-proliferation**

80. China has consistently dealt with non-proliferation issues in a highly responsible manner, actively participated in international non-proliferation cooperation and made active efforts to promote the resolution of nuclear issues in the regions concerned. China maintains that all countries should abandon zero-sum and cold-war thinking, fully respect the legitimate security concerns of all countries and eliminate the root causes of nuclear-weapons proliferation. All countries should strive to safeguard the authority and effectiveness of the international nuclear

non-proliferation system, abandon expediency and double standards, and peacefully address nuclear weapons proliferation concerns through political and diplomatic means within the framework of existing international law.

81. With regard to the Korean Peninsula issue, China has consistently advocated the denuclearization of the Peninsula, the maintenance of peace and stability on the Peninsula and the resolution of the issue through dialogue and consultation. In view of the continuously rising spiral of tension on the Peninsula, and in order to tackle both the symptoms and the root causes of the problems on the Peninsula thoroughly, China has put forward a “dual-suspension” initiative for the suspension of nuclear-missile tests by the Democratic People’s Republic of Korea and joint military exercises by the United States and the Republic of Korea, along with the concept of “parallel advancement” toward denuclearization and establishing a peace mechanism on the Peninsula, and has actively promoted their implementation. Since 2018, with the joint efforts of China and other parties concerned, the situation on the Peninsula has shifted from antagonistic tension to easing dialogue, initially achieving the “dual suspension” and moving towards the “parallel advancement”. Under the new conditions, China hopes that the Democratic People’s Republic of Korea and the United States will continue to maintain dialogue, earnestly respect and address each other’s reasonable concerns, and work together to promote Korean Peninsula denuclearization and build a peace mechanism on the Korean Peninsula. China stands ready to maintain close communication with all parties concerned, continue to play a constructive role and make unremitting efforts for the ultimate attainment of denuclearization and lasting peace on the Peninsula.

82. On the Iranian nuclear issue, China has consistently been committed to promoting dialogue and negotiation, seeking solutions conducive to the international nuclear non-proliferation system and peace and stability in the Middle East, and firmly upholding multilateralism and international rules. China, the United States, Russia, the United Kingdom, France, Germany, the European Union and Iran reached agreement on the Joint Comprehensive Plan of Action on the Iranian nuclear issue in Vienna in July 2015. China is deeply involved in the implementation process of the that joint agreement, including taking the lead in the Arak heavy water reactor redesign project, which has made remarkable progress. China actively supports the authorized supervision and verification in Iraq by the International Atomic Energy Agency and has provided a total of 7.8 million yuan in donations for pertinent Agency activities. Faced with major changes in the Iranian nuclear situation since 2018, China has actively pushed all parties to jointly maintain and implement the comprehensive agreement in the context of the overall situation and the long term. State Councillor and Minister for Foreign Affairs, Wang Yi, chaired meetings of ministers for foreign affairs on the Iranian nuclear issue in July and September 2018, at which a series of proposals on safeguarding and implementing the comprehensive agreement were put forward. These emphasized that safeguarding and implementing the comprehensive agreement served to safeguard the authority of the United Nations and the Security Council, the seriousness and authority of international agreements, multilateralism and basic norms of international law, and the international nuclear non-proliferation regime and peace and stability in the Middle East. China urges all parties to make correct political judgments, create a good environment for the implementation of the comprehensive agreement, fulfil their respective obligations, ensure the effective implementation of the agreement and resolve differences through dialogue and consultation. China is willing to work in an objective, fair and responsible manner to promote the process of political and diplomatic settlement of the Iranian nuclear issue while firmly safeguarding its own legitimate rights and interests.

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

83. China supports the right of all countries, especially developing countries, to the peaceful use of nuclear energy. It believes that non-proliferation should not be used as an excuse to undermine this right of all countries. China values the role of nuclear energy in promoting social and economic development, promotes technological research and industrial development and application of peaceful uses of nuclear energy, actively participates in and supports international cooperation in promoting world nuclear energy development and the peaceful use of nuclear energy, and fulfils its related international obligations.

#### **A. Promoting the peaceful use of nuclear energy**

84. China is working to build a harmonious and beautiful country and promoting the active role of nuclear energy in building a beautiful China. For more than half a century, China has created and developed a nuclear industry system in line with its national conditions, which has seen the wide use of nuclear energy as an energy source, as well as in medicine, industry, public safety and other fields, and has promoted social development.

85. As a clean, green and low-carbon energy source, nuclear power plays an important role in meeting Chinese energy demands, adjusting its energy structure and coping with climate change. China has steadily promoted nuclear power construction based on the principle of safety and efficiency. To date, there are 45 nuclear power units in commercial operation in mainland China, with a total installed capacity of 45.9 million kilowatts; 11 nuclear power units with a capacity of 12.18 million kilowatts are under construction. Fifteen further nuclear power units, with an installed capacity of 16.6 million kilowatts, are in the planning stage. China currently boasts the most rapid and largest-scale growth of nuclear power construction in the world and is the first country to operate third-generation nuclear power units commercially. It has also played an important role in the world recovery of nuclear energy following the Fukushima nuclear accident.

86. China adheres to the “closed cycle” model of nuclear fuel development and has essentially completed its nuclear fuel cycle system, with the supply of nuclear fuel able to meet the fuel requirements of the nuclear power plants that have been put into operation. The manufacture of fuel components required by domestic nuclear power plants has essentially achieved autonomy; the pilot plant for reprocessing spent fuel built independently by China has passed thermal tests. Two near-surface disposal sites for low and medium-level radioactive waste have been established, and work on deep geological disposal facilities for high-level radioactive waste is being carried out.

87. China has accumulated rich experience and technology regarding the design, construction and operation of nuclear power and actively promotes the development and application of safer and more advanced nuclear energy technologies on this basis. Domestic and overseas construction of power plants using independent third-generation “Hualong One” nuclear-power technology has begun and is progressing smoothly. A demonstration fast-reactor project is under way, and a high-temperature gas-cooled reactor demonstration project is expected to be completed this year. Demonstration of an independently developed pool-type low-temperature heating reactor has been completed, affording a new alternative for providing safe and clean heating in cold areas. Positive progress has also been made in the research and development of a fusion-engineering test reactor.

88. China has actively promoted the development and application of nuclear technology and put together a relatively complete industrial system, with an annual output value in excess of 300 billion yuan and a steady 20 per cent annual growth rate. Nuclear technology has come into wide use in industry, agriculture, medicine, environmental protection, public health, public safety and other fields. In the field of agriculture and food safety, Chinese scientists are cultivating nearly a quarter of the world total of mutant plant varieties; nearly 200,000 tons of agricultural products undergo irradiation processing, accounting for about a third of the global total. Nuclear science and technology have become an important means of transforming and innovating traditional agriculture and promoting agricultural modernization. In the area of life and health, medical linear accelerators are rapidly coming into wide application in China, with nearly 2000 medical linear accelerators already in use, and nuclear medical-imaging methods have developed rapidly. In the public-safety field, detection technology has come into wide use in air, rail, sea and highway cargo-safety inspections, and security inspection equipment developed by China is exported to overseas markets. In the field of environmental protection, nuclear technology is widely used in environmental pollution monitoring and the treatment and disposal of waste gas, water and industrial residue.

89. China values sharing experiences with countries working to develop nuclear energy, under the premise of nuclear non-proliferation. It has signed intergovernmental agreements on cooperation in peaceful uses of nuclear energy with more than 30 countries. It has carried out extensive exchanges and cooperation on this basis, including personnel visits, equipment and technology imports, and economic and trade exchanges with these countries, achieving mutual benefit and win-win results. These cooperative ties are subject to strict International Atomic Energy Agency safeguards or are carried out in the context of the Agency's technical cooperation programmes.

90. As the largest developing country in the world, China attaches great importance to cooperation with other developing countries and is committed to providing assistance within its capabilities to other emerging nuclear-energy countries and countries interested in the peaceful use of nuclear energy. At present, China has set up a yearly nuclear-energy scholarship to provide financial assistance for students from emerging nuclear-energy countries to come to China to study nuclear science and technology.

91. The Government of China actively supports multilateral cooperation and exchanges to promote the development of nuclear technology and the peaceful use of nuclear energy. It has joined the Forum for Nuclear Cooperation in Asia, the Global Nuclear Energy Partnership and the Framework Agreement of the Generation IV International Forum, and has signed the Charter of that Forum. It has also signed the joint implementation agreement on the International Thermonuclear Experimental Reactor, as well as 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.

## **B. Technical assistance to other Member States through the International Atomic Energy Agency**

92. China supports and actively participates in the technical cooperation activities of the International Atomic Energy Agency within the framework of the Statute of the Agency. China pays its yearly contributions to the Technical Cooperation Fund of the Agency in full and on time and, while receiving assistance from the Agency, it also

supports the technical cooperation activities of the Agency in the areas of human resources, material resources and funding.

93. As at May 2018, China had contributed \$46 million to the Technical Cooperation Fund of the Agency, received scholars from other countries for visits and training more than 3,000 times, and sent experts to developing countries more than 2,000 times. China contributed more than 6.4 million euros to the Fund in 2017, ranking third among member countries.

94. China actively organizes international conferences on the peaceful uses of nuclear energy, providing platforms for delegates from all countries to pursue nuclear-energy development and explore nuclear-energy cooperation. Since 2015, China has successfully hosted such major international events as the World Nuclear Energy Development Forum, the Women in Nuclear Global annual conference, the International Conference on Nuclear Engineering and the International Nuclear Power Plant Operation and Maintenance Conference. China strongly supports the technical cooperation work of the Agency and hosted 11 meetings in that connection in 2018.

95. Working within the Agency framework and in cooperation with the countries concerned, China completed the retrofitting of microreactors in Ghana and Nigeria in August 2017 and December 2018 respectively. These modifications reduced the proliferation risk presented by the microreactors while enhancing their safety, thereby contributing to the improved development of peaceful nuclear energy activities in those countries. China stands ready to assist other countries in carrying out low-enrichment microreactor retrofitting work on the basis of its successful existing models.

### **C. Nuclear safety and civil nuclear liability**

96. In its nuclear-energy development, China has consistently upheld the principle of “safety first, quality first”, adopted strict and effective safety measures, established sound and effective systems of nuclear-safety laws and regulations, oversight and emergency response, and strengthened infrastructure construction. To date, all nuclear plants in China have maintained good operational-safety records, and their main performance indicators have reached advanced international levels.

97. China has established and continuously improved its laws and regulations related to the safety of nuclear energy. It has promulgated and implemented numerous laws and regulations, such as the Law of the People’s Republic of China on Nuclear Safety, the Law of the People’s Republic of China on Prevention and Control of Radioactive Pollution, and the Environmental Protection Law of the People’s Republic of China, along with the Regulations of the People’s Republic of China on Safety Supervision and Administration of Civil Nuclear Facilities, the Regulations of the People’s Republic of China on Control of Nuclear Material, and the Regulations on Safety of Nuclear Power Plant Design. Moreover, China has drafted Provisions for Nuclear Safety and Radioactive Pollution Prevention and Control under the thirteenth Five-Year Plan and Long-Range Goals for 2025, and is actively pursuing the drafting of the Atomic Energy Law.

98. China has consistently attached importance to nuclear emergency-response management, successively promulgating such legislation as the Regulations of the People’s Republic of China on Emergency Management of Nuclear Accidents in Nuclear Power Plants, the National Nuclear Emergency Preparedness Plan and the Regulations on the Management of Nuclear Accident Emergency Preparedness Exercises in Nuclear Power Plants. The revised National Nuclear Emergency Preparedness Plan was promulgated in June 2013. At present, China has set up

nuclear-emergency professional technical-support centres and nuclear-emergency professional rescue teams at the national level.

99. China pays attention to raising scientific awareness of nuclear energy among the public. The Government of China and businesses actively propagate information on nuclear energy safety, nuclear-emergency policies and regulations and basic knowledge of nuclear science and technology, enhancing public confidence in the safety of nuclear energy. Disclosure of the relevant information is made even more open and transparent through such means as press conferences, nuclear-safety information-disclosure platforms, social-responsibility reports, safety-development white papers and institutional open houses.

100. China has been making continuous efforts to establish a compensation system for nuclear damage. The newly implemented Nuclear Safety Law for the first time clearly stipulates legal compensation for nuclear damages and fully reflects the people-oriented governing philosophy of the Government of China and the great importance it attaches to the issue of liability for nuclear damage.

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