



# **The Legal and Regulatory Systems for Nuclear Security in China**

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# OUTLINE



I. Introduction

II. The Legal and Regulatory System for Nuclear Security

III. The Regulatory Practice for Nuclear Security

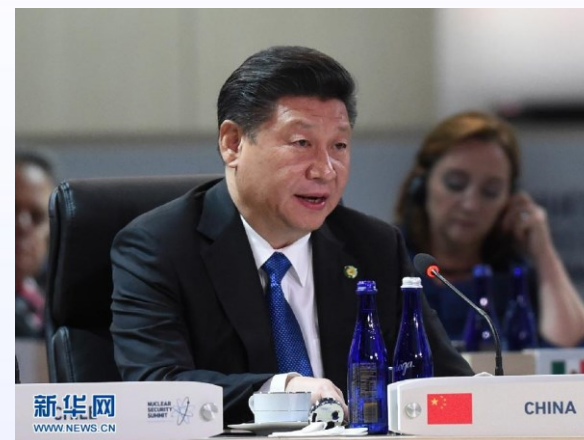
IV. International Cooperation in Nuclear Security



# I. Introduction

**The Chinese government has always been attaching great importance to nuclear security.**

- China resolutely opposes Nuclear terrorism in any form.
- The State leaders have participated in all the four Nuclear Security Summits, stated China's commitment to strengthening nuclear security and combating nuclear terrorism;
- During the 3rd and 4th Nuclear Security Summits, President Xi Jinping stated the concept of “Rationale, Coordination, Ballance” and advocated the construction of a "Fairness, Cooperation, Win-Win" international nuclear security system.



President Xi Jinping at the 4<sup>th</sup> Nuclear Security Summit



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# The Hierarchy of Legislation in China

## Laws

- Enacted and promulgated by the National People's Congress or its Standing Committee, with the highest legal effect

## Regulations

- Enacted and promulgated by the State Council in accordance with the Constitution and other relevant laws, with legal effect

## Rules & Measures

- Enacted and promulgated by departments of the State Council within their respective scopes of responsibility and power, in accordance with relevant provisions of laws or regulations, also with certain legal effect

## Normative Documents

- Enacted and promulgated by competent authorities



## II-1. Laws



- **The existing laws**
  - **The National Security Law** makes it clear that nuclear security is an integral part of national security;
  - **The Counter-Terrorism Law** is the direct legal basis for combating nuclear terrorism;
  - Other laws including the **Nuclear Safety Law** and the **Law on Prevention and Control of Radioactive Pollution** have provisions on other aspects and issues of nuclear security
  
- **The Atomic Energy Law** is in the process of enactment (it has been listed in the legislation plans of the State Council and the Standing Committee of the National People's Congress).
  - To be the immediate higher-level law of nuclear security-related laws and regulations
  - To include general provisions on nuclear security
    - ✓ Establishment and implementation of a national nuclear security system
    - ✓ Facility operators assuming primary responsibilities of nuclear security
    - ✓ Graded Approach for physical protection of nuclear materials and nuclear facilities.
    - ✓ .....



# Nuclear Security-Related Laws

Laws	Nuclear security-related contents
The Atomic Energy Law (in enactment)	The immediate higher-level law of nuclear security-related laws and regulations
The National Security Law	The role of nuclear security in national security
The Counter-Terrorism Law	Direct basis for combating nuclear terrorism
The Law on Prevention and Control of Radioactive Pollution	Security of nuclear facilities and radioactive sources
The Nuclear Safety Law	Interface between nuclear security and nuclear safety
The Cyber-Security Law and the Law on Guarding State Secrets	Cyber-security and information non-disclosure
The Emergency Response Law	Response to nuclear security events



## II-2. Regulations

### ➤ Existing regulations:

- **Regulations on Nuclear Material Control** is currently the legal basis for nuclear security management in China:
  - ✓ Sets up a licensing system for nuclear materials
  - ✓ License holders have to
    - ❑ Establish a nuclear material accounting and control system
    - ❑ Establish a strict security system
    - ❑ Take reliable security precautions
    - ❑ Once theft of nuclear materials is known, immediately make investigation, recover the material, and file reports
  - ✓ The transport of nuclear materials shall be carried out following applicable laws and regulations
- Other regulations such as the **Regulations on Safety administration for Transport of Radioactive Items** include specific provisions on transport and other issues





## II-2. Regulations

- The **Regulations on Nuclear Security** is in the process of enactment.
  - A specific regulation dedicated to nuclear security
  - Has been listed in the legislation plan of the State Council
  - Soliciting the opinion from public was completed in 2016.



# Nuclear Security-Related Regulations

Regulations	Nuclear security-related contents
<b>The Regulations on Nuclear Security (in enactment)</b>	<b>Regulations dedicated to nuclear security</b>
The Regulations on Nuclear Material Control	Control of nuclear materials
The Regulation on Internal Security and Safeguard for Enterprises and Public Institutions	Security and safeguard
The Regulations on Security Administration of Major Public Event	Security of large public events
The Regulations for Safety Protection of Computer Information Systems	Cyber-security



## II-3. Rules and Measures

- **Rules for the Implementation of Regulations on Nuclear Material Control** set up three protection levels for nuclear materials, and requested that facility operators shall establish commensurate physical protection systems.
- **Provisions on Security and Safeguard of Nuclear Power Plants**
  - Designates competent authorities and supervising and guiding departments
  - According to the principle that “whoever’s in charge is responsible”, a multi-level security and safeguard responsibility system is set up.
  - Detailed requirements are provided for security staffing, fencing, access control, technical precautions, communication equipment, and acceptance and effectiveness assessment of physical protection projects, etc.
  - May be invoked for the security and safeguard of other types of nuclear facilities
- **Measures for the Administration of Security Technology Products** includes detailed provisions on the production licensing, safety certification (production registration), and quality testing of security technology products.
- Other rules and measures have also some provisions on the safety and security of nuclear and other radioactive materials.



# Nuclear Security-Related Rules and Measures

Rules and Measures	Nuclear security-related contents
Rules for the Implementation of Regulations on Control of Nuclear Materials	Security of nuclear materials
Provisions on Security and Safeguard of Nuclear Power Plants	Security of nuclear facilities
Measures for the Administration of Security Technology Products	Security equipment
Provisions on Physical Protection of Nuclear Materials in International Transport Provisions on the Administration of Road Transport of Radioactive Articles	Transport security
.....	.....



## II-4. Normative Documents

- CAEA has promulgated a dozen of normative documents, such as the **Guidance on Administration of the Reception, Shipment and Internal Transfer of Nuclear Materials**, to
  - Provide technical guidance for the security of nuclear materials and facilities on
  - ✓ Administration of reception, shipment and internal transfer of nuclear materials
  - ✓ Access control of nuclear facilities
  - ✓ Administration of sealing, inventorying and inspection for the accounting and control of nuclear materials
  - ✓ Reporting on the preliminary design of the physical protection systems of nuclear facilities, etc.
  - Prescribe administrative measures for nuclear material registration and inspection and reporting in nuclear material control



Administrative Measures for  
Nuclear Material Registration



Administrative Measures for Inspection  
in Nuclear Material Control



Administrative Measures for Reporting  
in Nuclear Material Control



# Nuclear Security-Related Normative Documents



Normative Documents	Nuclear security -related contents
Physical Protection of Nuclear Materials and Facilities; Contents of and Requirements on the Preliminary Design Report of Physical Protection Systems of Nuclear Facilities; Format and Contents of Application Documents for the Nuclear Material License; Guidelines on Access Control of Nuclear Facilities; Guidelines on Administration of Inventorying Nuclear Materials	Security of nuclear materials and facilities
Administrative Measures for the Reviewing and Approval of Transshipment and Transit Transport of Nuclear Products (Trial version); Interim Provisions on Administration of Road Transport of Nuclear Spent Fuel	Transport security
Classification of Radioactive Sources; Classification and Inventory of Radioactive Articles (Trial version); Requirements on Security Precautions for the Storage of Highly Toxic Chemicals and Radioactive Sources	Security of radioactive materials
Administrative Measures for Nuclear Emergency Reporting	Emergency response



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### III. The Regulatory Practice for Nuclear Security



Chinese government has been continuously strengthening and improving nuclear security capacity.

China has kept an excellent record on nuclear security during the past 60 years of nuclear energy development;





# III. The Regulatory Practice for Nuclear Security



## 1. Strengthening planning and legislation

- Strengthening top-level design for nuclear security and having incorporated nuclear security as an important part into the 13th Five-Year Plan for Nuclear Industry;
- Continuously improving the legal system for nuclear security

## 2. Strengthening workforce building

- Setting up a dedicated Division of Nuclear Security within the CAEA
- Establishment of the State Nuclear Security Technology Center
- Providing training programs for facility operators (about 1000 people annually)



The State Nuclear Security  
Technology Center

# III. The Regulatory Practice for Nuclear Security

## Enhancing technical capabilities



- Increasing investment in technical R&D



- Carrying out force-on-force and table-top exercises on nuclear security event



- Renovation of security systems of old facilities



- Setting up a National Data Center for Nuclear Material Control





# III. The Regulatory Practice for Nuclear Security

## Intensifying regulatory inspection



- Continuously strengthening nuclear security supervision and inspection (regular and non-regular inspections)





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## IV. International Cooperation in Nuclear Security

China has been taking an active part in international cooperation process for the enhancement of global nuclear security.

- China has been engaged in bilateral and multilateral international cooperations in nuclear security;
- China has acceded to all the international legal instruments for the nuclear security. and honored its obligations;
- China's State President has participated in all 4 Nuclear Security Summits;
- China is one of the founding partners of the Global Initiative to Combat Nuclear Terrorism



## IV. International Cooperation in Nuclear Security



- ✓ In 2007, China joined the IAEA Incident and Trafficking Database (**ITDB**);
- ✓ China is one of the major nuclear counties to ratify the Convention on the Physical Protection of Nuclear Material (**CPPNM**) and its 2005 Amendment;
- ✓ In 2010, China signed the International Convention for the Suppression of Acts of Nuclear Terrorism (**ICSANT**);
- ✓ Since the establishment of **NSGC**, China has been actively participating in NSGC activities and making its contribution;
- ✓ China continuous contribution to Nuclear Security Fund (**NSF**).....



On 2008.10.28, the National People's Congress Ratified the Amendment to the CPPNM; and handed by the vice Chairman of CAEA to the DG of IAEA on 2009.9.14.



## IV. International Cooperation in Nuclear Security



### ➤ Cooperating with the IAEA in the field of nuclear security

- **Successfully carried out IPPAS Mission;**
- **Actively donates to the Nuclear Security Fund;**
- **Supports the Agency's Nuclear Security Plans;**
- **provide expert contribution to the development of nuclear security guidance publications**
- .....

### ➤ Carrying out bilateral cooperation with countries including the US in the field of nuclear security

- **Establishment of the Center of Excellence on Nuclear Security;**
- **Holding China-US joint regional training courses;**
- **Helping Ghana in LEU transformation of its Miniaturized Neutron Source Reactor (MNSR)**
- .....



IAEA Director-General Mr. Yukiya Amano, accompanied by CAEA Vice Chairman Mr. WANG Yiren, visited the State Nuclear Security Technology Center (Center of Excellence on Nuclear Security) in April 2017.



# Summary

- **The Chinese government has always laid great importance on nuclear security**
  - Established and continuously improving an effective regulatory system for nuclear security, coordinated with governmental departments;
  - Implemented a series of effective measures to strengthen nuclear security and maintained an excellent record.
- **In the future**
  - Continuously strengthening regulatory capabilities of the government;
  - Continuously strengthening workforce building and improving the talent management mechanisms;
  - Strengthening capability building and further promoting nuclear security;
  - Further deepening international exchange and cooperation and taking on an active role in global of nuclear security governance.





Thank you for your attention !