

# **Democratic People's Republic of Korea**

## **Nano Technology Law**

Adopted by Decree No. 2314 of the Standing Committee of the Supreme People's Assembly on July 12, Juche 107 (2018)

### **Chapter 1: Basics of the Nano Technology Law**

#### **Article 1 (Mission of the Nano Technology Law)**

The Nano Technology Law of the Democratic People's Republic of Korea aims to contribute to the continuous development of nano technology by strictly establishing systems and order in the drafting and implementation of nano technology development plans, research and development of nano technology, review and introduction of nano technology, integration of nano technology and the economy, and ensuring conditions for nano technology projects.

#### **Article 2 (Definitions of Terms)**

The definitions of terms in this law are as follows:

1. "Nano" means very small, and 1nm represents a length unit of one billionth of a meter.
2. "Nano technology" refers to the technology of creating or handling materials with sizes ranging from 1nm to 100nm in at least one spatial direction.
3. "Nano industry" is a typical knowledge-intensive industry and high-tech industry that utilizes nano technology.

#### **Article 3 (Principles of Nano Technology Development)**

The state determines key and highly influential areas of nano technology as the main focus and prioritizes efforts in these areas.

#### **Article 4 (Principles of Integration of Nano Technology and the Economy)**

The state accelerates economic construction based on the development of nano technology and realizes the integration of nano technology and the economy.

#### **Article 5 (Principles of Training Nano Technology Talent and Investment in Nano Technology Fields)**

The state systematically and prospectively trains nano technology talent and increases investment in the field of nano technology.

## **Article 6 (International Exchange and Cooperation)**

The state promotes exchange and cooperation with other countries and international organizations in the field of nano technology.

## **Chapter 2: Nano Technology Development Plan**

### **Article 7 (Basic Requirements for Nano Technology Development Plan Projects)**

Properly establishing and implementing nano technology development plans is a prerequisite for continuously advancing nano technology to higher stages. National planning agencies, central scientific and technological administrative guidance agencies, and relevant institutions, enterprises, and organizations must realistically establish and implement nano technology development strategies and plans.

### **Article 8 (Drafting of Nano Technology Development Strategy)**

The central scientific and technological administrative guidance agency must draft a nano technology development strategy that clarifies the direction, goals, and implementation methods of nano technology development based on the national scientific and technological development strategy. The nano technology development strategy must be approved by the Cabinet.

### **Article 9 (Issuance of Guidelines for Drafting Nano Technology Development Plans)**

The central scientific and technological administrative guidance agency must draft guidelines for drafting nano technology development plans based on the nano technology development strategy and send them to relevant institutions, enterprises, and organizations.

### **Article 10 (Classification of Nano Technology Development Plans and Tasks)**

Nano technology development plans are classified into long-term plans and annual plans based on the implementation period, and nano technology development tasks are classified into national tasks and institutional or enterprise tasks based on their importance.

### **Article 11 (Drafting of Long-term Nano Technology Development Plans)**

Relevant institutions, enterprises, and organizations must draft long-term nano technology development plans to realize the nano technology development strategy. The long-term nano technology development plans must specify the overall goals of nano technology development, annual goals, conditions for support, and technical and economic effectiveness for the relevant period.

## **Article 12 (Drafting of Annual Nano Technology Development Plans)**

Relevant institutions, enterprises, and organizations must draft annual nano technology development plans based on the national tasks outlined in the nano technology development strategy, combining institutional and enterprise tasks such as ordered tasks and contract tasks.

## **Article 13 (Review, Approval, and Issuance of Nano Technology Development Plans)**

Relevant institutions, enterprises, and organizations must draft a preliminary nano technology development plan and submit it to the central scientific and technological administrative guidance agency through higher-level institutions. The central scientific and technological administrative guidance agency must conduct a scientific and technological review of the submitted preliminary nano technology development plan. The national planning agency must review the preliminary nano technology development plan that has passed the scientific and technological review, accurately align the conditions for support, and issue it to relevant institutions, enterprises, and organizations.

## **Article 14 (Adjustment and Modification of Nano Technology Development Plans)**

Relevant institutions, enterprises, and organizations cannot adjust or modify the issued nano technology development plans. If it is necessary to add or adjust the nano technology development plans, they must obtain the agreement of the central scientific and technological administrative guidance agency and the approval of the institution that approved the plan.

## **Article 15 (Registration and Implementation of Nano Technology Development Plans)**

Relevant institutions, enterprises, and organizations must register the nano technology development plans with the scientific and technological administrative guidance agency and the statistical agency and implement them monthly, quarterly, and annually without fail.

## **Article 16 (Verification and Evaluation of Nano Technology Development Plan Implementation Rates)**

Relevant institutions, enterprises, and organizations must verify the monthly and quarterly implementation rates of the nano technology development plans with the scientific and technological administrative guidance agency and receive evaluation from the statistical agency. Implementation rates of nano technology development plans that are not registered with the relevant regional scientific and technological administrative guidance agency and the statistical agency or have not received verification and evaluation are not recognized.

### **Article 17 (Supply of Funds for Nano Technology Development Projects)**

Financial and banking institutions must supply funds for scientific and technological development projects in the nano technology sector to relevant institutions, enterprises, and organizations in a timely manner based on the implementation rates of nano technology development plans verified by the scientific and technological administrative guidance agency.

### **Article 18 (Summary of Nano Technology Development Plan Implementation)**

Relevant institutions, enterprises, and organizations must strictly summarize the implementation status of nano technology development plans monthly, quarterly, and annually.

## **Chapter 3: Research and Development of Nano Technology**

### **Article 19 (Basic Requirements for Research and Development of Nano Technology)**

Actively researching and developing nano technology is an essential requirement for rapidly advancing the country's applied science and technology and economy. Relevant institutions, enterprises, and organizations must accurately determine and implement the research and development targets and goals of nano technology based on the nano technology development strategy.

### **Article 20 (Basic Research for Nano Technology Development)**

The central scientific and technological administrative guidance agency, scientific research institutions, and educational institutions must solve the fundamental and methodological issues urgently arising in the development of nano technology.

### **Article 21 (Research and Development of Nano Materials and Their Application Technologies)**

The central scientific and technological administrative guidance agency and relevant institutions, enterprises, and organizations must actively research and develop nano materials and their application technologies to realize the subjectification, modernization, and scientification of the people's economy.

### **Article 22 (Analysis and Certification of Nano Materials and Nano Technology Products)**

Institutions, enterprises, and organizations must receive analysis and certification from relevant institutions for the developed nano materials and nano technology products. In this case, they must pay the fees set by the central pricing agency.

### **Article 23 (Organization of Joint and Cooperative Research)**

The central scientific and technological administrative guidance agency and relevant institutions, enterprises, and organizations can organize joint and cooperative research among institutions, enterprises, and organizations based on the scale and scientific and technological content of the nano technology research targets.

### **Article 24 (Organization and Operation of Nano Technology Research Units)**

The central scientific and technological administrative guidance agency and relevant institutions can organize and operate various forms of nano technology research units to promptly solve scientific and technological issues arising in reality by intensively mobilizing and utilizing scientific and technological forces and material and technical means in the field of nano technology.

### **Article 25 (Organization, Modification, and Dissolution of Nano Technology Research Units)**

Institutions, enterprises, and organizations must obtain the agreement of the central scientific and technological administrative guidance agency and the approval of the relevant institution to newly organize, modify, or dissolve nano technology research units.

### **Article 26 (International Exchange and Cooperation in the Field of Nano Technology)**

The central scientific and technological administrative guidance agency and relevant institutions, enterprises, and organizations must expand and develop exchange and cooperation with other countries and international organizations in the field of nano technology. If necessary, they can organize various forms of joint research and joint technology development with other countries in the field of nano technology.

## **Chapter 4: Review and Introduction of Nano Technology**

### **Article 27 (Basic Requirements for Review and Introduction of Nano Technology)**

The review and introduction of nano technology are important tasks for evaluating the value of newly researched and developed nano technology and adopting it in production and construction. The central scientific and technological administrative guidance agency must accurately review and promptly introduce newly researched and developed or advanced nano technology brought in from other countries.

### **Article 28 (Organization and Duties of the Nano Sector Scientific and Technological Review Committee)**

To review nano technology, the central scientific and technological administrative guidance agency organizes a non-permanent Nano Sector Scientific and Technological Review Committee. The Nano Sector Scientific and Technological Review Committee reviews tasks to be included in the national scientific and technological development plan and their implementation status, nano technology achievements, and nano technology brought in from other countries, and provides academic guidance on nano technology research projects of relevant institutions, enterprises, and organizations.

#### **Article 29 (Review of Nano Technology)**

Institutions, enterprises, organizations, and citizens who wish to receive a review of nano technology must submit nano technology review application documents to the central scientific and technological administrative guidance agency. The central scientific and technological administrative guidance agency must pass the nano technology review application documents to the Nano Sector Scientific and Technological Review Committee for review within the specified period. Nano technology that has not been reviewed or has not passed the review cannot be promoted, disseminated, circulated, introduced, or imported and exported.

**Article 30 (Registration of Nano Technology Achievements)** The central scientific and technological administrative guidance agency must register nano technology achievements that have passed the review and issue the corresponding certificates.

#### **Article 31 (Establishment of Nano Technology Data Base)**

The central scientific and technological administrative guidance agency and relevant institutions must collect nano technology achievement data from our country and nano technology information from other countries, and establish data bases categorized by sector and subject.

#### **Article 32 (Dissemination of Nano Technology)**

The central scientific and technological administrative guidance agency and relevant institutions must establish a systematic nano technology dissemination system, widely disseminate advanced nano technology data, and regularly organize nano technology exhibitions and presentations.

#### **Article 33 (Introduction of Important Nano Technology)**

The national planning agency and the central scientific and technological administrative guidance agency must draft plans for the introduction of nano technology of national significance and issue them to relevant institutions, enterprises, and organizations.

Institutions, enterprises, and organizations that receive the nano technology introduction plans must implement them without fail.

#### **Article 34 (Introduction of Nano Technology Based on Orders and Contracts)**

Relevant institutions, enterprises, and organizations must introduce registered nano technology achievements based on orders and contracts.

### **Chapter 5: Integration of Nano Technology and the Economy**

#### **Article 35 (Basic Requirements for Integration of Nano Technology and the Economy)**

Establishing the nano industry and integrating nano technology with the economy based on the development of nano technology is an important requirement for building a knowledge-based economy. The central scientific and technological administrative guidance agency and relevant institutions, enterprises, and organizations must draft and implement plans to realize the integration of nano technology and the economy.

#### **Article 36 (Establishment of Nano Industry and Nano Technology Development Zones)**

Based on achievements in the field of nano technology, nano industries and nano technology development zones can be established and operated in areas where nano scientific and technological forces are concentrated. The national planning agency, the central scientific and technological administrative guidance agency, and relevant institutions must draft reasonable plans related to the establishment of nano industries and nano technology development zones and implement them in alignment with the plans.

#### **Article 37 (Preferential Treatment for Nano Industry and Nano Technology Development Zones)**

The state provides preferential economic activity conditions for the establishment and operation of nano industries and nano technology development zones, including priority provision of bank loans, favorable land use conditions, and tax reductions.

#### **Article 38 (Production of Nano Technology Products)**

Relevant institutions, enterprises, and organizations can establish and operate production bases for nano technology products based on their intellectual creations. If they intend to newly organize a nano technology product production base, they must obtain the agreement of the central scientific and technological administrative guidance agency and the approval of the relevant institution.

#### **Article 39 (Realization of Technological Renovation and Modernization Based on Nano Technology)**

Relevant institutions, enterprises, and organizations must realize technological renovation and modernization of equipment and production processes based on advanced nano technology.

#### **Article 40 (Review of Technological Renovation and Modernization Targets Based on Nano Technology)**

Relevant institutions, enterprises, and organizations must receive a review from the Nano Sector Scientific and Technological Review Committee if they intend to renovate and modernize equipment and production processes based on nano technology or introduce nano technology-related factories, equipment, or production processes from other countries.

#### **Article 41 (Requirements for Technological Renovation and Modernization Based on Nano Technology)**

Relevant institutions, enterprises, and organizations must carry out technological renovation and modernization of equipment and production processes based on nano technology in accordance with technical tasks and design requirements. Equipment and production processes renovated and modernized based on nano technology must be reviewed and confirmed by the central scientific and technological administrative guidance agency.

### **Chapter 6: Ensuring Conditions for Nano Technology Projects**

#### **Article 42 (Basic Requirements for Ensuring Conditions for Nano Technology Projects)**

Ensuring the necessary conditions for nano technology projects is crucial for the development of nano technology. The state systematically increases investment in nano technology projects and ensures the conditions for nano technology research projects are fully met.

#### **Article 43 (Ensuring Funds for Nano Technology Development)**

The national planning agency, financial and banking institutions, and relevant institutions, enterprises, and organizations must systematically increase the funds allocated for scientific and technological development projects in the nano technology sector. Relevant scientific research institutions and educational institutions must establish and efficiently operate production bases for nano technology products to fully resolve research and development funding issues.

#### **Article 44 (Strengthening Nano Technology Research Bases)**



The national planning agency and relevant institutions must establish nano technology research bases, including laboratories, experimental labs, and pilot plants, to ensure there are no obstacles to nano technology research projects.

#### **Article 45 (Ensuring Conditions for the Implementation of Nano Technology Development Plans)**

The national planning agency and relevant institutions, enterprises, and organizations must fully ensure the labor, equipment, funds, and materials required for the implementation of nano technology development plans in alignment with the plans.

#### **Article 46 (Joint Utilization of Nano Technology Research Equipment)**

The central scientific and technological administrative guidance agency must enable the joint utilization of nano technology research equipment and means available in institutions, enterprises, and organizations for the development of the country's nano technology. The national planning agency must regularly notify the central scientific and technological administrative guidance agency of the possession and utilization status of nano technology research equipment and means in institutions, enterprises, and organizations.

#### **Article 47 (Training and Placement of Nano Technology Talent)**

Scientific and educational guidance institutions and relevant institutions must establish an education system for training nano technology talent and systematically nurture nano technology talent. Relevant institutions must prioritize the placement of talented individuals who have undergone talent training systems or received nano technology education in other countries in the nano technology research sector.

### **Chapter 7: Guidance and Control of Nano Technology Projects**

#### **Article 48 (Basic Requirements for Guidance and Control of Nano Technology Projects)**

Strengthening guidance and control of nano technology projects is an important guarantee for thoroughly implementing the state's scientific and technological policies. The state establishes a proper guidance system for nano technology projects and strengthens supervision and control.

#### **Article 49 (Establishment of Nano Technology Guidance and Control System)**

The central scientific and technological administrative guidance agency must establish a comprehensive guidance and control system for nano technology projects to ensure their proper implementation.

**Article 50 (Supervision and Inspection of Nano Technology Projects)**

The central scientific and technological administrative guidance agency and relevant institutions must conduct regular supervision and inspection of nano technology projects to ensure compliance with the state's scientific and technological policies.

**Article 51 (Reporting and Evaluation of Nano Technology Projects)**

Relevant institutions, enterprises, and organizations must regularly report the progress and results of nano technology projects to the central scientific and technological administrative guidance agency. The central scientific and technological administrative guidance agency must evaluate the reported progress and results to ensure the successful implementation of nano technology projects.

**Article 52 (Penalties for Non-compliance with Nano Technology Policies)**

Institutions, enterprises, organizations, and individuals who fail to comply with the state's nano technology policies are subject to penalties, including administrative, civil, and criminal penalties.

**Article 53 (Amendment and Repeal of the Nano Technology Law)**

The Nano Technology Law may be amended or repealed by the Standing Committee of the Supreme People's Assembly.