### THE POLITBURO

# **COMMUNIST PARTY OF VIETNAM**

No. 52-NO/TW

Hanoi, September 27, 2019

#### RESOLUTION

# POLICIES AND REGULATIONS ON ACTIVE PARTICIPATION IN THE FOURTH INDUSTRIAL REVOLUTION

#### I - Situation and cause

The Fourth Industrial Revolution has given way to various opportunities as well as multiple challenges in every nation, organization, and person; has been increasingly affecting all aspects of socio-economic life of Vietnam.

In recent years, the Communist Party and the Government have coordinated governments of all levels to promote application and development of science, technology, renovation, research, and improvement of accessibility and participation in the Fourth Industrial Revolution.

The Prime Minister already promulgated directive pertaining to improvement of accessibility to the Fourth Industrial Revolution and approved the Scheme promoting the sharing economy. On such a basis, ministries, departments, and local governments have developed and implemented several policies so as to promote the development of information technology, electronic-telecommunication.

Telecommunication infrastructures are built relatively consistently. Digital economy is being rapidly formed and developed and is becoming an important part of the economy; digital technology is being applied in industry, agriculture, and services; more and more new, transnational, digital technology-based business models and services are created and the Internet is creating more and more jobs, income, features, and quality of life for the general public.

The development of e-Government while moving towards digital government is being extensively implemented and has yielded positive results as of initial stages.

However, the level of active participation in the Fourth Industrial Revolution of Vietnam remains low. Institutions and policies are plagued with drawbacks and limitations. Personnel compositions and quality have yet to meet the demands.

Science technology and innovation are yet the drive for socio-economic development; the newly formed national innovation system is inconsistent and ineffective.

The national digital transformation process remains slow and passive due to limited infrastructures serving digital transformation; multiple enterprises are rather passive, have low

capacity for accessing, applying, and developing modern technology. Digital economy remains in small scale. Fighting against crimes and ensuring cybersecurity are plagued with challenges.

The aforementioned limitations are caused by both objective and subjective reasons with the latter being dominant. Awareness pertaining to the Fourth Industrial Revolution among the political system and society are faced with multiple limitations, drawbacks, and inconsistencies. The ability to analyze and strategically forecast science and technology development trends that affect socio-economic life of Vietnam remains limited.

The mindset required in developing and organizing institutions fulfilling demands of the Fourth Industrial Revolution is not renovated in a timely fashion and remains sluggish. State management are faced with various difficulties and behind on real life situations. Cooperation between ministries, departments, between central authorities and local authorities is not strict enough. Difficulties and drawbacks are not resolved in a timely fashion.

## II - Principles and objectives

# 1. Principles

- Active participation in the Fourth Industrial Revolution is an inevitably subjective requirement, a strategically important task of both the short term and the long term of the entire political system and society, associated with comprehensive international integration. Adequate awareness pertaining to the nature of the Fourth Industrial Revolution in order to renovate mindset and action and deeming it the groundbreaking solution with appropriate step and roadmap are chances for Vietnam to make breakthroughs in socio-economic development.
- The Fourth Industrial Revolution brings both challenges and chances. It is necessary to promptly seize and effectively utilize opportunities to improve working effectiveness and productivity, competitiveness of the economy, effect, effectiveness of social management via researching, transferring, and extensively applying achievements of the Fourth Industrial Revolution in various aspects of the socio-economic life, especially key and potential sectors that serve as the drive for growth in order to catch up, improve along, and exceed certain aspects compared to the region and the world.

Actively prevent and adapt in order to minimize any negative effects; ensure national defense, security, social safety and justice, and strength of country's development process.

The Fourth Industrial Revolution requires renovating economic management, social management, and appropriate institution development. An open, creative, and pilot approach to new practice issues is required to facilitate innovation. Avoid all signs of indifference, lack of confidence, and passivity without being careless, hasty, or volatile.

- Maximize all resources; ensure sufficient resources for active participation in the Fourth Industrial Revolution, deem the internal resources to be decisive, strategic, and long-term while the external resources to be important, ground-breaking, and securing coordination of the Communist Party and Government.

# 2. Objectives

General objectives: Effectively utilize opportunities brought by the Fourth Industrial Revolution to promote a reform of growth model, restructuring of the economy, strategic breakthroughs, and modernization of the country; extensively develop digital economy; rapidly and sustainably develop based on science, technology, innovation, and highly skilled labor; improve quality of life, well-being of the general public; ensure national defense, security, and protection of the ecosystem.

Specific tasks by 2025: Maintain Vietnam's ranking in the top 3 ASEAN countries based on Global Innovation Index (GII).

Develop digital infrastructure to advanced level of the ASEAN; cover all communes with broadband Internet. Digital economy accounts for approximately 20% GDP; work productivity increases by more than 7%/year on average.

Essentially finish digital transformation within agencies of the Communist Party, the Government, Vietnamese Fatherland Front, and socio-political organizations. Vietnam is ranked among the top 4 ASEAN countries for e-Government ranking according to assessment of the United Nations. Vietnam has at least 3 smart cities in 3 key economic zones in the Northern region, the Southern region, and the Central highlands.

Specific tasks by 2030: Maintain Vietnam's ranking among the world's top 40 countries based on GII. 5G network coverage reaches a nationwide level; all people have access to low-cost broadband Internet.

Digital economy accounts for approximately 30% GDP; work productivity increases by more than 7,5%/year on average. Complete the development of digital Government. Form a series of smart cities in 3 key economic zones in the Northern region, the Southern region, and the Central highlands; gradually connect to smart city network in the region and around the world.

#### 3. Vision until 2045

Vietnam becomes one of the leading smart manufacturing and service centers, startup and innovation centers in Asia; Vietnam has high work, sufficient capacity to master and apply modern technology in all socio-economic, environmental, national defense and security aspects.

### III - Policies and regulations on active participation in the Fourth Industrial Revolution

- 1. Innovate mindset, unify awareness, and increase leadership of the Communist Party, management of the Government, participation of the Vietnamese Fatherland Front and sociopolitical organizations.
- Raise awareness of committee levels of the Communist Party and governments pertaining to the need for active and effective participation in the Fourth Industrial Revolution and consider it a primary task.

Associate targets and tasks relating to participation in the Fourth Industrial Revolution with socio-economic development, environmental protection, national defense and security tasks and objectives.

- Identify the core content of the policies on active participation in the Fourth Industrial Revolution as promoting science and technology development and innovation in all sectors and fields and promoting national digital transformation, which prioritizes development of digital economy, smart cities, e-Government and moves toward digital government.
- The Government prioritizes extensive transfer and application of new technologies in various sectors and fields; is responsible for promoting science and technology research, facilitating, providing targeted support to allow the general public and enterprises to decide on participation in the Fourth Industrial Revolution.
- Utilize effective participation of the Vietnamese Fatherland Front, socio-political organizations, entities affected by the policies in the process of making and supervising implementation of policies pertaining to the Fourth Industrial Revolution. Develop cooperation regulations between the Government and enterprises, business associations in developing and implementing policies.
- 2. Develop regulations to facilitate active participation in the Fourth Industrial Revolution and national digital transformation
- Improve regulations, especially regulations on enterprises, business startup, intellectual property, commerce, investment, and business to facilitate national digital transformation and develop products, services, new economic models based on digital platform; promptly prevent any negative impact, in both economic and social aspects, ensure national security, defense, social order and safety on cyberspace.

Add new lines of business benefiting from investment incentives to promote participation in the Fourth Industrial Revolution. Develop regulations to allow state-owned enterprises to invest in technology development, make risky investment, and invest in business startup and innovation.

- Develop appropriate management regulations for digital economic and facilitate innovation. Promulgate controlled testing framework for technologies, products, services, and new business models created from the Fourth Industrial Revolution. Regulate time and space constraints of the test.

Research and develop testing grounds for technology enterprises using advanced models around the world. Identify, acknowledge, and develop systems of standards and regulations for new products, technologies, and business models.

- Actively participate in regional and global legal frameworks in order to develop digital economy. Develop regulations and policies pertaining to data, data administration, facilitate the creation, connection, sharing, and extraction of data in a manner that guarantees safety and cybersecurity in Vietnam and aim to connect to ASEAN and the world. Develop legal

framework for digital identification and national digital verification; establish national digital identification framework.

- Develop financial regulations to encourage social resources to invest in scientific research, development and application of technology and innovation. Amend regulations on investment in order to facilitate capital attraction, share purchase, sale, merger, acquisition of technology enterprises; enable foreign investors to contribute capital in startup businesses.
- Develop regulations on intellectual property rights, protection and effectively utilization of intellectual properties created by Vietnam; encourage commercialization and transfer of intellectual property rights, especially inventions in Vietnam on the basis of compliance with Vietnam's regulations and law while maintaining national security. Encourage multinational companies to locate their research and development facilities in Vietnam.
- Develop regulations and policies pertaining to finance-monetary, electronic payment, tax administration, and cross-border services that fit digital economy development trend. Develop regulations on order placement for manufacturing and public procurement with respect to digital products manufactured by Vietnam.
- Promulgate policies to limit negative impact of the Fourth Industrial Revolution.

Create legal framework to enable implementation of new employment models and jobs on digital platform and finalize social security policies to suit the Fourth Industrial Revolution and promptly deal with difficulties in social development.

Promote participation in the Fourth Industrial Revolution to deal with environmental pollution, climate change, and rising sea level.

- Develop and implement the National strategy for developing technology enterprises, prioritizing digital technology enterprises, hi-tech enterprises that design, create, and manufacture in Vietnam.
- Develop and improve legal framework pertaining to sustainable smart city development; systems of national standards and regulations; data infrastructure system and assessment indicators of smart city effectiveness.

Identify roadmap for pilot implementation and select cities for pilot implementation of smart cities; permit pilot implementation of specific mechanisms while carrying out pilot implementation of smart cities in a manner that guarantees effectiveness and sticks to practical conditions.

# 3. Essential infrastructure development policies

- Implement high quality broadband across Vietnam. Encourage eligible private enterprises to develop telecommunication infrastructures and other infrastructures serving national digital transformation.

- Develop and improve national data infrastructures synchronously. Create national data centers, regional data centers, and local data centers which are connected synchronously and consistently. Form reliable and stable data systems of the Government and enterprises. Invest and equip systems, instruments that collect, store, process, and protect public data.
- Produce planning for development of national digital payment platform in a synchronous, consistent, common manner, utilize and effectively operate telecommunication network in order to provide low-cost payment services for the general public.

Develop regulations and policies to extensively promote cashless payment. Encourage Vietnamese enterprises to develop digital payment systems. Manage and closely control cross-border payment methods.

- Invest in upgrading technical infrastructures in order to ensure cybersecurity and safety. Develop and effectively implement Resolution No. 30-NQ/TW dated July 25, 2018 of the Politburo on National cybersecurity strategy.
- Upgrade infrastructures of essential and important sectors to stay consistent and modern, fulfill technology application requirements of the Fourth Industrial Revolution, especially energy and traffic. Ensure stability of national energy security.
- 4. National innovation development and improvement policies
- Restructure all public science and technology research facilities. Develop and improve national innovation centers, prioritizing core technologies of the Fourth Industrial Revolution. Improve effectiveness of public investment made for science and technology research on the basis of applying new administration model in accordance with worldwide good practices.
- Adopt specific and ground-breaking regulations, policies in regard to innovation centers. Develop national innovation centers with enterprises act as the center, universities and research institutes act as researchers. Encourage domestic and foreign universities, enterprises, organizations to establish innovation centers in Vietnam.
- Promulgate national standards and regulations to serve as the basis for applying and developing core technologies of the Fourth Industrial Revolution in production and in life.

Promptly and synchronously create legal framework and policies to implement and develop new technologies. Develop and implement programs to assist enterprises in researching, applying technology, performing digital transformation, improving productivity, effectiveness, and competitiveness of the economy.

- Improve models, regulations, and policies to make breakthroughs in regard to hi-tech zones. Based on Hoa Lac hi-tech zone (Hanoi) and hi-tech zones in Da Nang and Ho Chi Minh City, develop innovative cities of international standards. Promote development of startup ecosystem; promote establishment of national startup centers, for the time being, in Hanoi, Da Nang, and Ho Chi Minh City.

# 5. Human resource development policies

- Review and renovate education and training contents, programs by improving accessibility, creativity, and adaptability to an ever changing and developing technology environment; integrate digital skills and mandatory foreign language(s) in full-time education programs.

Renovate teaching and learning methods by applying digital technology; use corporate assessment as the measurement for training quality of universities pertaining to the field of information technology. Encourage new education and training models based on digital platforms.

- Develop incentive and preferential regulations for technology organizations, individuals, and enterprises to directly engage in education and training, and create products serving digital economy. Build advanced technology education and training centers in public-private partnership model. Improve regulations and policies encouraging, attracting, and using skilled labor and highly skilled labor.
- Extensively develop vocational training and training to assist career change. The Government promulgates policies assisting employees who undergo retraining, refresher training, advanced training, and skill training for career change.
- Create open learning network for Vietnamese nationals. Comply with the roadmap for popularizing basic digital knowledge, cybersecurity and safety skills for the general public. Promote communication, raise awareness, and develop digital culture in the community.
- 6. Priority sector and technology development policies
- Focus on developing priority sectors with high availability such as communication, electronic-telecommunication; cybersecurity and safety; smart manufacturing industry; finance-banking; ecommerce; digital agriculture; digital tourism; digital culture; medical; education and training.
- Prioritize resources for implementation of research programs of national importance pertaining to priority technologies, especially information technology and communication, mechatronic, new technologies in energy, artificial intelligence, biotechnology, biomedical electronics.
- The Government shall implement policies assisting sectors and priority technologies primarily via renovating, improving institutions, creating favorable business environment; assisting investment in infrastructures; developing human resources; developing science and technology; placing order for public procurement.

### 7. International integration policies

- Expand and deepen science and technology cooperation with other partners, especially strategic partners with advanced science and technology leading in the Fourth Industrial Revolution. Actively engage in global innovation network.

- Promote attraction and effective use of foreign resources and international partners for the purpose of research, application, innovation, business startup, and technology transfer.
- Improve regulations and policies pertaining to outward investment by raising technology standards, encouraging joint ventures, increasing connection and transfer of technologies between domestic enterprises and enterprises making outward investment; closely manage operation of enterprises based on cross-border service provider platform in order to maintain equal business environment in Vietnam. Improve regulations on risky investment with foreign capital.
- 8. Policies promoting digital transformation in agencies of the Communist Party, the Government, the Vietnamese Fatherland Front, and socio-political organizations
- Pioneer extensive digital transformation in agencies of the Communist Party, the Government, the Vietnamese Fatherland Front, and socio-political organizations in a consistent, coherent, and synchronous manner.
- Develop digital database of the Government and governments of all levels; enable the general public to update necessary information on operation of the government apparatus. Invest in developing infrastructures for collecting, managing data and transactions on the Internet in all government authorities.
- Prioritize developing public officials, officials, and public employees satisfying requirements of the Fourth Industrial Revolution; standardize and improve capacity of state officials of all levels.

Clarify functions, tasks, and regulations on cooperation between state authorities in digital transformation. Improve administrative procedures in order to suit operation of digital government and minimize any in-person affairs.

## IV - Organizing implementation

- 1. Communist Party committees of provinces, cities, Communist Party designated representation, Communist Party committees affiliated to central government shall learn, popularize this Resolution to their officials and Communist Party members; develop programs and plans for implementing the Resolution.
- 2. The National Assembly Communist Party shall take charge researching, amending, and improving regulations and law to facilitate participation in the Fourth Industrial Revolution in accordance with the Resolution; promulgate regulations on controlled testing to encourage development of new products, services, and business models of digital economy.
- 3. The Communist Party designated representation of the Government shall take charge developing and implementing the National strategy for the Fourth Industrial Revolution; promulgate and implement the Scheme for national digital transformation and schemes, programs, plans for participation in the Fourth Industrial Revolution; develop and request competent bodies to promulgate regulations, policies on controlled testing of new projects,

models, and businesses. Prioritize allocating sufficient resources for implementation of the tasks mentioned under the Resolution.

- 4. The Vietnamese Fatherland Front and socio-political organizations shall develop programs and plans for supervising implementation of the Resolution.
- 5. Communist Party Central Committee's Publicity and Education Commission shall take charge and cooperate with Communist Party Central Committee's Economic Commission and relevant authorities in guiding popularization of implementation of the Resolution.
- 6. Communist Party Central Committee's Economic Commission shall take charge and cooperate with relevant authorities in regularly monitoring, supervising, inspecting, and encouraging implementation of the Resolution; periodically organizing preliminary assessment and final assessment of the implementation, and submitting reports to the Politburo and Communist Party Central Committee's Executive Secretary.

ON BEHALF OF THE POLITBURO GENERAL SECRETARY

**Nguyen Phu Trong**