# THE PRESIDENT

# THE SOCIALIST REPUBLIC OF VIETNAM Independence - Freedom - Happiness

No. 18/2015/L-CTN

Hanoi, December 4, 2015

# ORDER

# On the promulgation of law<sup>(\*)</sup>

THE PRESIDENT OF THE SOCIALIST REPUBLIC OF VIETNAM

Pursuant to Articles 88 and 91 of the Constitution of the Socialist Republic of Vietnam; Pursuant to Article 91 of the Law on Organization of the National Assembly; Pursuant to Article 57 of the Law on Promulgation of Legal Documents,

# PROMULGATES:

## The Law on Hydro-meteorology

Which was passed on November 23, 2015, by the XIII<sup>th</sup> National Assembly of the Socialist Republic of Vietnam at its 10<sup>th</sup> session.

President of the Socialist Republic of Vietnam TRUONG TAN SANG

<sup>(\*)</sup> Công Báo Nos 1247-1248 (29/12/2015)

# THE NATIONAL ASSEMBLY

Independence - Freedom - Happiness

THE SOCIALIST REPUBLIC OF VIETNAM

No. 90/2015/QH13

## LAW

## **On Hydro-meteorology**<sup>(\*)</sup>

*Pursuant to the Constitution of the Socialist Republic of Vietnam; The National Assembly promulgates the Law on Hydro-meteorology.* 

#### Chapter I

#### GENERAL PROVISIONS

#### Article 1. Scope of regulation

This Law prescribes hydro-meteorological activities, including management and operation of the network of stations; forecast and warning; information and data; hydro-meteorological support and services; climate change monitoring; weather modification and state management; rights, responsibilities and obligations of agencies, organizations and individuals engaged in hydro-meteorological activities.

Article 2. Subjects of application

This Law applies to Vietnamese agencies, organizations and individuals; foreign organizations and individuals; and international organizations participating in hydrometeorological activities in the territory of the Socialist Republic of Vietnam.

**Article 3.** Interpretation of terms

In this Law, the terms below shall be construed as follows:

1. Hydro-meteorology collectively refers to hydrology, meteorology and marine hydrology.

2. Meteorology means the state of the atmosphere and process of development of natural phenomena in the atmosphere.

3. Hydrology means the state, process of development and movement of river, spring, canal, ditch and lake water.

4. Marine hydrology means the state, process of development and movement of sea water.

5. Hydro-meteorological observation means the direct or indirect systematic observation and measurement of parameters demonstrating the state, phenomena and process of development of the atmosphere, river, spring, canal, ditch and lake water and sea water.

6. Weather means the state of the atmosphere at a point of time and in a specific area determined in meteorological factors and phenomena.

7. Hydro-meteorological forecast means the bringing out of information and data on the future hydro-meteorological state, development process and phenomena in an area or at a position over a specified period of time.

<sup>(\*)</sup> Công Báo Nos 1247-1248 (29/12/2015)

8. Hydro-meteorological warning means the bringing out of information and data on the risk of occurrence of dangerous or unusual hydro-meteorological phenomena that may affect or cause damage to people, property and the environment.

9. Hydro-meteorological forecast or warning bulletin means the product of forecasting or warning organizations or individuals presenting hydro-meteorological forecast and warning information and data in documents, data sheets, maps, charts, symbols, images and sounds.

10. Hydro-meteorological disaster means an unusual hydro-meteorological phenomenon that may cause damage to people and property and affect the environment, living conditions and socio-economic activities.

11. Climate means the combination of weather conditions in a given area, characterized by long-term statistical quantities of meteorological factors in such area.

12. Climate forecast means the bringing out of information and data on the state and trend of climate in the future and the extent of variation of climate factors by month, season or year compared to the mean value of many years.

13. Climate change means the change of the climate over a long period of time due to impacts of natural conditions and human activities, demonstrated in the global warming, sea level rise and increase of extreme hydro-meteorological phenomena.

14. Climate change monitoring means the process of collection of information and data, analysis, assessment and monitoring of the development of the climate over a long period of time to determine indications of climate change and impacts of climate change on natural resources, the environment, eco-systems, living conditions and socio-economic activities.

15. Climate change scenario means a reliable scientifically grounded assumption about the future trend of climate based on the relationship between socio-economic activities, greenhouse gas emissions, climate change and sea level rise.

16. Hydro-meteorological work means a physical facility meeting specialized technical requirements for installation of hydro-meteorological measuring instruments and communication equipment.

17. Hydro-meteorological station means a selected place meeting specialized technical requirements for installation of one or more than one hydro-meteorological work, including surface meteorological station, upper air meteorological station, weather radar station, agro-meteorological station, hydrological station, marine hydrological station, rainfall measuring station, lightning position station and other specialized stations.

18. Climate change monitoring station means a station selected among hydro-meteorological stations or built separately up to technical requirements and national and international standards to observe the climate, chemical composition of the atmosphere and sea level rise.

19. Technical corridor of a hydro-meteorological work means the space above and area on the ground, under the ground, on the water surface and under the water necessary for a hydro-meteorological work to operate according to technical standards and for collected hydrometeorological data to objectively reflect natural characteristics of the area, ensuring accuracy up to national and international standards.

20. Weather modification means a man-made impact on the physical and chemical processes of the atmosphere through scientific and technological solutions aiming to prevent or mitigate a natural disaster or create a favorable weather pattern in a specific area for a given period of time to serve socio-economic, national defense and security activities. 21. Climate standard means the mean value of meteorological factors in a given period of time, normally 30 years, serving as a basis for assessing the climate difference between one place or period of time and another.

22. Extreme hydro-meteorological phenomenon means a hydro-meteorological phenomenon which is unusual in terms of level, time and area of occurrence, possibly causing damage to people and property, affecting the environment, living conditions and socio-economic activities.

23. Sea level rise means the rise of the average ocean water level due to impact of climate change, excluding high tide and water level rise due to typhoons and other natural impacts.

Article 4. Principles of hydro-meteorological activities

1. Hydro-meteorological activities that commonly serve socio-economic development, national defense and security and natural disaster prevention and combat shall be funded by the state budget.

2. Hydro-meteorological activities shall be managed in a centralized and uniform manner nationwide.

3. Hydro-meteorological observation must ensure accuracy, continuity and consistency and observation results connectable within the country and to the world.

4. Hydro-meteorological forecast and warning must be reliable; and hydro-meteorological forecast and warning information shall be transmitted and broadcast in a timely, accurate and complete manner.

5. The hydro-meteorological information reception and transmission system shall be guaranteed to operate regularly and continuously at a high speed and on a wide scope.

Article 5. Policies of the State toward hydro-meteorological activities

1. The State shall ensure resources for the construction, management and operation of the network of national hydro-meteorological stations; hydro-meteorological forecast and warning; climate change monitoring commonly serving socio-economic development, national defense and security, and natural disaster prevention and combat.

2. To diversify funding sources for investment in hydro-meteorological activities; to encourage organizations and individuals to participate in hydro-meteorological observation, forecast, warning, scientific research, technology transfer, and exploitation and use of hydro-meteorological information and data.

3. To prioritize investment in the construction of exclusive-use telecommunications networks in accordance with the law on telecommunications and the use of national telecommunications networks for the reception and transmission of information and data serving hydro-meteorological forecast and warning and natural disaster prevention and combat.

4. To promote the popularization of knowledge about hydro-meteorology and climate change; to effectively exploit hydro-meteorological information and data in production, life and national disaster prevention and combat for the community; to ensure gender equality; to pay attention to mountainous people, coastal and island fishermen, ethnic minority areas, areas with extremely difficult socio-economic conditions and other special groups so as to develop appropriate forms, media and materials for each group.

5. To ensure sufficient land areas for hydro-meteorological works to operate according to specialized technical requirements.

6. To intensify training of human resources for hydro-meteorological activities; to adopt mechanisms to attract and preferentially treat hydro-meteorological officers working in ethnic

minority areas and mountainous areas, on islands and in areas with extremely difficult socioeconomic conditions in accordance with law.

7. To develop science and technology for hydro-meteorology and climate change monitoring; to prioritize scientific research, transfer of advanced technology and equipment and application of high technologies in hydro-meteorological activities.

8. To promote international cooperation on hydro-meteorology and climate change monitoring and fulfill obligations of a member of international organizations on hydrometeorology and climate change monitoring.

Article 6. Law dissemination and education and public information to raise awareness about hydro-meteorological activities

1. The Ministry of Natural Resources and Environment shall regularly organize various forms of law dissemination and education and public information to raise awareness about hydro-meteorology and climate change, especially among mountainous people, coastal and island fishermen and in ethnic minority areas and areas with extremely difficult socio-economic conditions; to develop and implement a scheme on law dissemination and education and public information to raise awareness about hydro-meteorology and climate change.

2. Ministries, ministerial-level agencies, government-attached agencies and People's Committees at all levels shall, within the ambit of their tasks and powers, coordinate with mass media agencies and direct education and training institutions under their respective management in, organizing law dissemination and education and public information to raise awareness about hydro-meteorology and climate change.

3. The Vietnam Fatherland Front Committees and member organizations of the Front, business associations and other social organizations shall, within the ambit of their tasks and powers, coordinate with the state management agencies in charge of hydro-meteorology in mobilizing and guiding the people to participate in protecting hydro-meteorological works, receiving, exploiting and using hydro-meteorological information and data, and complying with the law on hydro-meteorology and climate change.

Article 7. Communication on hydro-meteorological activities

1. The Vietnam News Agency, Radio Voice of Vietnam, Vietnam Television and press agencies shall:

a/Transmit and broadcast hydro-meteorological forecasts and warnings and climate change information in accordance with this Law and the press law;

b/ Coordinate with the Ministry of Natural Resources and Environment, other ministries, sectors and localities in developing radio and television broadcasts and news reports to provide public information and raise public awareness about hydro-meteorology and effectively exploit hydro-meteorological forecast and warning news and information about climate change.

2. Local radio and television stations shall:

a/ Transmit and broadcast hydro-meteorological forecast and warning news issued by the national hydro-meteorological forecast and warning system and information about climate change to serve local natural disaster prevention and combat and socio-economic development;

b/ Coordinate with local hydro-meteorological agencies and organizations and related units in developing radio and television broadcasts to provide public information and raise public awareness about hydro-meteorology and effectively exploit hydro-meteorological forecast and warning news and information about climate change.

## Article 8. Prohibited acts

1. Taking advantage of hydro-meteorological activities to harm the interests of the State and lawful rights and interests of organizations and individuals.

2. Encroaching and occupying the space above and areas on the ground, under the ground and on the water surface and under the water of hydro-meteorological works.

3. Violating the regulations on technical corridors of hydro-meteorological works.

4. Affecting hydro-meteorological works and measuring instruments.

5. Infringing upon hydro-meteorological works and measuring instruments, communication equipment and other technical equipment of hydro-meteorological works; bumping and colliding against hydro-meteorological works; destroying and displacing elevation markers.

6. Obstructing the management and operation of hydro-meteorological works.

7. Carrying out hydro-meteorological forecasting and warning activities without licenses or against licenses granted by competent state agencies.

8. Exploiting and using hydro-meteorological information and data in contravention of this Law and relevant laws.

9. Deliberately violating technical regulations and professional processes in hydrometeorological activities.

10. Conducting weather modification without a plan approved by a competent state agency or against the approved plan.

11. Concealing, failing to provide hydro-meteorological information and data, or deliberately providing false, incomplete, inaccurate or untimely hydro-meteorological information and data.

12. Acting against the regulations on transmission and broadcasting of hydro-meteorological forecast and warning news.

13. Competent persons taking advantage of their positions and powers or acting *ultra vires* against the law on hydro-meteorology.

14. Taking advantage of international cooperation on hydro-meteorology and climate change monitoring to commit illegal acts.

# Chapter II

# MANAGEMENT AND OPERATION OF HYDRO-METEOROLOGICAL STATION NETWORKS

Article 9. Contents of management and operation of hydro-meteorological station networks

 $1.\,Formulation$  of master plans and plans on development of hydro-meteorological station networks.

2. Hydro-meteorological observation.

3. Hydro-meteorological investigation and survey.

4. Management and protection of hydro-meteorological works.

5. Quality management of hydro-meteorological measuring instruments.

Article 10. Hydro-meteorological station networks

1. Networks of hydro-meteorological stations include the network of national hydrometeorological stations and the network of exclusive-use hydro-meteorological stations. 2. The network of national hydro-meteorological stations consists of hydro-meteorological stations and climate change monitoring stations to observe hydro-meteorology and monitor climate change in a systematic, continuous, stable and permanent manner built, managed and operated by the Ministry of Natural Resources and Environment.

3. The network of exclusive-use hydro-meteorological stations operates to observe hydrometeorology for specific purposes built, managed and operated by other ministries, sectors, localities, organizations and individuals in accordance with law.

Article 11. Planning of the network of national hydro-meteorological stations

1. Planning principles:

a/ Ensuring the network observation reflect spatial and temporal developments of hydrometeorological factors to be observed and achieving the purpose of exploitation and use of hydro-meteorological information and data;

b/ Ensuring synchrony, modernity, continuity and conformity with socio-economic development objectives and national defense and security requirements;

c/ The master plan on the network of national hydro-meteorological stations must be consistent with and integrated in the master plan on the national network of natural resources and environmental observation, enabling the sharing of data among observation networks and ensuring effective and efficient use of the state budget.

2. Bases for planning:

a/ National socio-economic strategy, master plan and plan; development strategy of the hydro-meteorological sector; national climate change strategy; national strategy for natural disaster prevention and combat; national water resource strategy; national strategy for development of information and communication technologies; national master plan on land use; national master plan on telecommunications development and other relevant strategies, master plans;

b/ Implementation results of the previous period's hydro-meteorological sector development strategy, national climate change strategy, and master plan on the network of national hydro-meteorological stations;

c/Scientific and technological advances in hydro-meteorological observation, measurement, transmission of hydro-meteorological forecasts and warnings and information about climate change monitoring.

3. The planning period of the network of national hydro-meteorological stations is 10 years with a 20-year vision.

4. Principal contents of the master plan:

a/ Analysis and overall assessment of natural, socio-economic and environmental conditions, practical hydro-meteorological and climate change response activities; identification of hydro-meteorological information and data needed for socio-economic development, national defense and security, natural disaster prevention and combat and climate change response;

b/ Evaluation of the implementation of the master plan on the network of national hydro-meteorological stations of the previous period; hydro-meteorological observation and climate change monitoring activities; implementation results of the hydro-meteorological sector development strategy, master plan and plans;

c/ Assessment of spatial and temporal developments of hydro-meteorological factors to be observed;

d/ Determination of the density, quantity, positions, planning maps and list of stations and observation contents of each station in the network of national hydro-meteorological stations;

dd/ Identification of resources, roadmap and solutions for implementing the master plan.

5. Responsibilities to formulate and approve the master plan:

The Ministry of Natural Resources and Environment shall organize the formulation of the master plan on the network of national hydro-meteorological stations, and submit it to the Prime Minister for approval.

6. Adjustment to the master plan:

a/ The master plan on the network of national hydro-meteorological stations shall be reviewed and adjusted once every five years or to meet urgent requirements on socio-economic development and national defense and security assurance or when the strategies, master plans and plans mentioned at Point a, Clause 2 of this Article see changes that greatly affect the contents of the master plan;

b/ The Ministry of Natural Resources and Environment shall submit adjustments to the master plan under Point a of this Clause to the Prime Minister for decision.

7. The master plan on the network of national hydro-meteorological stations and its adjustments shall be appraised in accordance with the planning law before being approved.

Article 12. Plans on development of networks of exclusive-use hydro-meteorological stations of ministries, sectors and localities

1. Ministries, sectors and localities shall make plans on development of networks of exclusive-use hydro-meteorological stations when they need to exploit and use hydro-meteorological information and data for their own purposes.

2. Planning principles:

a/ To achieve the purpose of exploitation and use of hydro-meteorological information and data of ministries, sectors and localities;

b/ To ensure synchrony, modernity, continuity and conformity with development objectives of ministries, sectors and localities;

c/ The network of exclusive-use hydro-meteorological stations must not overlap the network of national hydro-meteorological stations.

3. Planning bases:

a/ The strategies, master plans and plans mentioned at Point a, Clause 2, Article 11 of this Law and relevant strategies, master plans and plans of ministries, sectors and localities;

b/ The master plan on the network of national hydro-meteorological stations and its implementation results by the planning time;

c/ The demand for exploitation and use of hydro-meteorological information and data for own purposes.

4. The plan on development of the network of exclusive-use hydro-meteorological stations shall be made together with the socio-economic development master plan and plan of each ministry, sector or locality and may be adjusted and supplemented annually to meet practical demand.

5. Principal contents of the plan:

a/ Identification of the demand of the ministry, sector or locality for exploitation and use of hydro-meteorological information and data;

b/ Assessment of the actual capacity of providing hydro-meteorological information and data of the network of national hydro-meteorological stations to meet the requirements or purpose of each ministry, sector or locality;

c/ Identification of the number, positions and list of exclusive-use hydro-meteorological stations; operating time and contents of observation of each station;

d/ Identification of resources and solutions for implementing the plan.

6. Responsibility to make and approve plans:

a/ Ministries, ministerial-level agencies, government-attached agencies and provinciallevel People's Committees shall organize the making of plans on networks of exclusive-use hydro-meteorological stations under their management;

b/ Ministers, heads of ministerial-level agencies, heads of government-attached agencies and provincial-level People's Committee chairpersons shall approve plans on development of networks of exclusive-use hydro-meteorological stations according to their respective competence after reaching written agreement with the Minister of Natural Resources and Environment.

Article 13. Hydro-meteorological observation

1. Requirements on hydro-meteorological observation:

a/ Observation must be accurate, continuous and consistent according to technical regulations and professional processes;

b/ Observation results must ensure representativeness, objectively reflect natural conditions and actual state of hydro-meteorological phenomena in the area where the station is located;

c/ Observation information and data shall be examined and qualitatively assessed.

2. Contents of hydro-meteorological observation:

a/ Observation contents shall be specified for each type of hydro-meteorological station;

b/ The Ministry of Natural Resources and Environment shall determine in detail observation contents of national hydro-meteorological stations;

c/ Ministries, sectors, localities, organizations and individuals shall identify observation contents of exclusive-use hydro-meteorological stations under their respective management;

d/ Meteorological stations that issue international notices, hydro-meteorological stations that exchange information and data with foreign countries and international organizations or have bilateral or multilateral cooperation agreements shall conduct other observations in accordance with treaties to which the Socialist Republic of Vietnam is a contracting party.

3. Hydro-meteorological observation by work owners:

When works under construction or in operation are impacted by or impact hydrometeorological conditions, thus likely affect the safety, life and property of the community, their owners shall organize observation and provide information and data in accordance with Clause 5 of this Article.

4. Hydro-meteorological observation on aircraft and seagoing ships:

Owners of aircraft and seagoing ships operating in the territory of the Socialist Republic of Vietnam shall be encouraged to conduct hydro-meteorological observation and transmit or inform observation results to the national hydro-meteorological forecast and warning system according to the coding system of the World Meteorology Organization (WMO) and International Civil Aviation Organization (ICAO).

5. Hydro-meteorological observation information and data shall be provided to the national hydro-meteorological forecast and warning system and the national hydro-meteorological database.

6. The Government shall detail Clauses 3 and 5 of this Article.

Article 14. Establishment, relocation and shutdown of hydro-meteorological stations

1. Establishment of a national hydro-meteorological station:

a/ The Minister of Natural Resources and Environment shall decide on the establishment of a national hydro-meteorological station under the master plan on the network of national hydro-meteorological stations approved by the Prime Minister;

b/ In special cases to meet requirements of national defense and security or natural disaster prevention and combat, the Ministry of Natural Resources and Environment shall assume the prime responsibility for, and coordinate with related ministries and sectors in, reporting the establishment of stations not yet included in the master plan on the network of national hydrometeorological stations to the Prime Minister for decision.

2. Establishment of exclusive-use hydro-meteorological stations:

a/ Ministers, heads of ministerial-level agencies, heads of government-attached agencies and provincial-level People's Committee chairpersons shall decide on the establishment of exclusive-use hydro-meteorological stations under their ministries', sectors' or localities' plans on development of exclusive-use hydro-meteorological stations;

b/ Organizations and individuals shall themselves decide on the establishment of exclusiveuse hydro-meteorological stations to meet their own demands;

c/ Competent persons, organizations and individuals mentioned at Points a and b of this Clause shall notify the establishment of exclusive-use hydro-meteorological stations to the Ministry of Natural Resources and Environment and provincial-level state management agencies in charge of hydro-meteorology of the localities where the stations are to be located.

3. Relocation of national hydro-meteorological stations:

a/A station within the network of national hydro-meteorological stations may be relocated only in the cases: It is irreparably damaged by a natural disaster; for national defense and security reasons; it is located within the area of an important socio-economic development project; its technical corridor is seriously infringed upon or it is affected by natural conditions that it no longer has sufficient technical conditions for observation or that its observation information and data are no longer representative and do not truly reflect the natural law and hydro-meteorological conditions in the area where it is located.

The new location of the station must meet observation requirements and comply with relevant laws;

b/ Parallel observation shall be organized at both old and new stations to ensure the continuity of data without interrupting the provision of information and data for hydrometeorological forecast and warning work and international exchange;

c/ The Minister of Natural Resources and Environment shall decide on the relocation of national hydro-meteorological stations.

4. Relocation of exclusive-use hydro-meteorological stations:

The relocation of exclusive-use hydro-meteorological stations shall be decided by competent persons or organizations or individuals that have established them; after the relocation

is completed, it shall be notified to the Ministry of Natural Resources and Environment and the provincial-level state management agency in charge of hydro-meteorology of the locality where it is located.

5. Shutdown of hydro-meteorological stations:

a/ A national hydro-meteorological station shall be shut down in case it is removed from the master plan or it no longer has technical conditions for observation and cannot be relocated.

The Minister of Natural Resources and Environment shall decide on the shutdown of national hydro-meteorological stations;

b/An exclusive-use hydro-meteorological station shall be shut down in case it is removed from the development plan of the ministry, sector or locality and is unqualified for inclusion in the network of national hydro-meteorological stations; it no longer has technical conditions for observation and cannot be relocated; or its operation purpose has been achieved.

The shutdown of exclusive-use hydro-meteorological stations shall be decided by competent persons or organizations or individuals that have established them; after the shutdown is completed, it shall be notified to the Ministry of Natural Resources and Environment and the provincial-level state management agency in charge of hydro-meteorology of the locality where it is located.

Article 15. Technical corridors of hydro-meteorological works

1. Every hydro-meteorological work must have a technical corridor according to technical regulations of the hydro-meteorological sector.

2. Technical corridors of hydro-meteorological works shall be prescribed in detail for each type of hydro-meteorological work.

3. Within the technical corridor of a hydro-meteorological work, no works and high rises may be constructed, no perennial trees may be planted to cover the work; no dam may be built in the river, the river bed or banks may not be excavated or dug up, no water is pumped or discharged or no vessels may be anchored, and other activities that change the representativeness of the observed area may not be carried out.

4. The Government shall detail this Article.

Article 16. Protection of hydro-meteorological works

1. Contents of protection of a hydro-meteorological work:

a/ Compilation of a dossier, erection of land markers of the technical corridor of the work, and notification to the commune-level People's Committee of the locality where the work is located;

b/ Protection of the technical corridor; prevention and stoppage of prohibited acts specified in Clauses 2, 3, 4, 5 and 6, Article 8 of this Law;

c/ Taking of measures to prevent, control and minimize damage caused by natural disasters and other risks;

d/ Maintenance, consolidation and repair of the work according to technical regulations and professional processes.

2. Responsibility for protecting hydro-meteorological works:

a/ The Ministry of Natural Resources and Environment shall organize protection of hydrometeorological works within national hydro-meteorological stations;

b/ Ministries, ministerial-level agencies, government-attached agencies, People's Committees at all levels, organizations and individuals shall organize protection of hydro-

meteorological works under their respective management in accordance with this Law and relevant laws.

Article 17. Hydro-meteorological investigation and survey

1. Requirements on hydro-meteorological investigation and survey:

a/ State budget-funded investigation and survey shall be conducted under approved programs and plans; investigation and survey results shall be qualitatively assessed;

b/ Observation and measurement in investigation and survey must comply with technical regulations and professional processes.

2. Contents of hydro-meteorological investigation and survey

a/ Location of points, stations and areas on the mainland for investigation and survey or coordinates of points and stations on the sea for investigation and survey;

b/ Construction of temporary hydro-meteorological works (if any) for investigation and survey purposes;

c/ Observation and measurement of hydro-meteorological factors, other related factors and topography of the surveyed area;

d/ Calculation and restoration of characteristics and developments of hydro-meteorological disasters that have occurred in the surveyed area;

3. Responsibility to conduct hydro-meteorological investigation and survey:

a/ The Ministry of Natural Resources and Environment shall conduct investigation and survey to additionally provide information and data to the network of national hydrometeorological stations or during and after the occurrence of a natural disaster;

b/ Ministries, sectors, localities, organizations and individuals may conduct investigation and survey for their own purposes.

Article 18. Quality management of hydro-meteorological measuring instruments

1. Contents of quality management of hydro-meteorological measuring instruments:

a/Issuance of the list of hydro-meteorological measuring instruments subject to inspection and calibration;

b/ Organization of inspection and calibration of hydro-meteorological measuring instruments.

2. The Minister of Science and Technology shall issue the list of hydro-meteorological measuring instruments subject to inspection and calibration at the proposal of the Ministry of Natural Resources and Environment.

Article 19. Inspection and calibration of hydro-meteorological measuring instruments

1. The inspection and calibration of hydro-meteorological measuring instruments on the list of those subject to inspection and calibration must comply with the law on measurement.

2. Hydro-meteorological measuring instruments not on the list of those subject to inspection and calibration must have dossiers of origin and technical characteristics conformable with technical regulations promulgated by competent state agencies.

3. The inspection and calibration of hydro-meteorological measuring instruments shall be conducted by qualified inspection and calibration organizations in accordance with the law on measurement.

#### Chapter III

## HYDRO-METEOROLOGICAL FORECAST AND WARNING

Article 20. Contents of hydro-meteorological forecast and warning activities

1. Collection, processing, analysis and storage of hydro-meteorological, climate change monitoring and relevant information and data nationwide, regionwide and worldwide.

2. Making and issuance of hydro-meteorological forecast and warning bulletins.

3. Provision of hydro-meteorological forecast and warning information.

4. Instruction on the exploitation of hydro-meteorological forecast and warning information.

5. Assessment of the quality of hydro-meteorological forecast and warning.

Article 21. Requirements on hydro-meteorological forecast and warning

1. Hydro-meteorological forecast and warning must comply with technical regulations on and professional processes of hydro-meteorological forecast and warning.

2. Organizations and individuals performing hydro-meteorological forecast and warning work shall take responsibility for hydro-meteorological forecast and warning bulletins they have issued.

3. Hydro-meteorological forecast and warning information shall be regularly and promptly updated on developments of hydro-meteorological phenomena, be easy to understand and use and presented in Vietnamese.

Article 22. Types of hydro-meteorological forecast and warning bulletins and hydrometeorological forecast and warning periods

1. Types of hydro-meteorological forecast and warning bulletins:

a/Weather, hydrological and marine hydrological forecast bulletins;

b/ Hydro-meteorological disaster forecast and warning bulletins;

c/ Climate and water source forecast bulletins;

d/ Thematic forecast bulletins at the request of users;

dd/ Hydro-meteorological forecast and warning bulletins according to treaties to which the Socialist Republic of Vietnam is a contracting party.

2. Hydro-meteorological forecast and warning periods:

a/ Extremely short period;

b/ Short period;

c/ Medium period;

d/ Long period;

dd/ Other periods.

3. The Minister of Natural Resources and Environment shall detail this Article.

Article 23. Contents of hydro-meteorological forecast and warning bulletins

1. Except the case prescribed in Clause 2 of this Article, a hydro-meteorological forecast and warning bulletin must include information on the state and future developments of forecast and warned objects suitable to the type of bulletin and hydro-meteorological forecast and warning period prescribed in Article 22 of this Law. 2. A hydro-meteorological disaster forecast and warning bulletins must include information on the type of disaster, intensity and level of disaster risk, current location and coordinates of the disaster and forecast development of the disaster.

Article 24. National hydro-meteorological forecast and warning system

1. The national hydro-meteorological forecast and warning system consists of public nonbusiness hydro-meteorological forecast and warning organizations at all levels managed by the Ministry of Natural Resources and Environment.

2. Principles of operation of the national hydro-meteorological forecast and warning system:

a/ Subordinate public non-business hydro-meteorological forecast and warning organizations shall submit to the professional management by superior ones;

b/ Subordinate public non-business hydro-meteorological forecast and warning organizations shall detail hydro-meteorological forecast and warning bulletins of superior ones, and issue hydro-meteorological forecast and warning bulletins for the areas under their management;

c/ Public non-business hydro-meteorological forecast and warning organizations shall regularly exchange and update information and data to ensure consistent, complete and timely hydro-meteorological forecast and warning information.

3. Responsibilities of the national hydro-meteorological forecast and warning system:

a/ To issue hydro-meteorological forecast and warning bulletins and hydro-meteorological disaster forecast and warning bulletins nationwide;

b/ To issue marine hydrological forecast and warning bulletins according to the responsibility of a WMO member;

c/ To participate in hydro-meteorological forecast and warning activities and share hydro-meteorological forecast and warning information and products with foreign, regional and international hydro-meteorological forecast and warning agencies and organizations in accordance with law;

d/ To collect hydro-meteorological information and data in the country and from other countries and international organizations; to transmit and broadcast Vietnam's hydrometeorological information and data to the world in accordance with treaties to which the Socialist Republic of Vietnam is a contracting party;

dd/ To provide, and instruct the exploitation and use of, hydro-meteorological forecast and warning information, data and products for agencies and organizations prescribed in Clause 1, Article 27 of this Law;

e/ To develop radio, television and news broadcasts to accurately, fully and timely disseminate hydro-meteorological forecast and warning information to the community in accordance with this Law and the press law;

g/ To comply with and regularly update technical regulations on, professional processes of, and the regulations on hydro-meteorological forecast and warning;

h/ To assess the quality of hydro-meteorological forecast and warning;

i/ To store hydro-meteorological forecast and warning information, data and bulletins.

Article 25. Hydro-meteorological forecast and warning of organizations and individuals outside the national hydro-meteorological forecast and warning system

1. Organizations and individuals carrying out hydro-meteorological forecast and warning

activities must have adequate conditions and hydro-meteorological warning and forecast activity licenses granted by a competent state management agency.

2. Organizations and individuals carrying out hydro-meteorological forecast and warning activities have the rights and obligations prescribed in Article 40 of this Law.

3. Conditions for carrying out hydro-meteorological forecast and warning activities for domestic organizations and individuals:

a/ Having appropriate physical and technical foundations;

b/ Having the legal entity status and appropriate staffs, for organizations;

c/ Possessing a professional qualification in a relevant discipline and experience in hydrometeorological forecast and warning activities, for individuals.

4. Conditions for carrying out hydro-meteorological forecast and warning activities for foreign organizations and individuals in Vietnam:

a/ Meeting all the conditions prescribed in Clause 3 of this Article;

b/ Lawfully operating or residing in Vietnam;

c/ Having employees who are fluent in Vietnamese or qualified interpreters.

5. Competence to grant, extend, invalidate and revoke hydro-meteorological forecast and warning activity licenses:

a/ The Minister of Natural Resources and Environment shall grant, extend, invalidate and revoke hydro-meteorological forecast and warning activity licenses of organizations and individuals performing hydro-meteorological forecast and warning work in two or more provinces and centrally run cities or in provinces or centrally run cities outside the locality where such organizations are headquartered or such individuals reside; and of foreign organizations and individuals carrying out hydro-meteorological forecast and warning activities in Vietnam;

b/ Provincial-level People's Committee chairpersons shall grant, extend, invalidate and revoke hydro-meteorological forecast and warning activity licenses of organizations and individuals performing hydro-meteorological forecast and warning work in their localities.

6. The hydro-meteorological forecast and warning activity license is valid for up to 5 years.

Organizations and individuals carrying out hydro-meteorological forecast and warning activities that commit violations of the law on hydro-meteorology or no longer meet all the conditions prescribed in Clause 3 or 4 of this Article shall, depending on the nature and seriousness of their violations, have their hydro-meteorological forecast and warning activity licenses invalidated or revoked.

7. The Government shall detail this Article.

Article 26. Transmission and broadcasting of hydro-meteorological disaster forecast and warning news

1. The transmission and broadcasting of hydro-meteorological disaster forecast and warning news must comply with the law on natural disaster prevention and combat.

2. In case of necessity, when transmitting and broadcasting hydro-meteorological disaster forecast and warning news to ethnic minority areas, agencies or organizations shall translate such news into appropriate ethnic minority languages.

Article 27. Use of hydro-meteorological forecast and warning bulletins

1. The steering or commanding agencies for natural disaster prevention and combat and search and rescue, Vietnam News Agency, Radio Voice of Vietnam, Vietnam Television, and agencies assigned to implement treaties to which the Socialist Republic of Vietnam is a contracting party shall use hydro-meteorological forecast and warning bulletins issued by the national hydro-meteorological forecast and warning system.

2. Agencies, organizations and individuals engaged in natural disaster prevention and combat activities shall use the latest hydro-meteorological disaster forecast and warning bulletins issued by the national hydro-meteorological forecast and warning system.

Article 28. Management of hydro-meteorological forecast and warning activities

1. Contents of management of hydro-meteorological forecast and warning activities:

a/Formulation and submission to competent authorities for promulgation or promulgation according to management agencies' competence of technical regulations, professional processes and regulations on hydro-meteorological forecast and warning;

b/ Inspection, supervision and assessment of the quality of hydro-meteorological forecast and warning;

c/ Scientific and technological research and application of technical advances in hydrometeorological forecast and warning activities;

d/ Provision and exchange of hydro-meteorological information and data with foreign countries and international organizations in accordance with law.

2. The national hydro-meteorological forecast and warning system and organizations and individuals carrying out hydro-meteorological forecast and warning activities shall comply with the provisions in Clause 1 of this Article on management of hydro-meteorological forecast and warning activities.

## Chapter IV

# HYDRO-METEOROLOGICAL INFORMATION AND DATA

Article 29. Contents of hydro-meteorological information and data

1. Observation, investigation and survey information and data on hydro-meteorology and air and water environment.

2. Hydro-meteorological information and data collected from foreign countries and international agencies and organizations.

3. Satellite charts, maps and photos; films and photos on objects of hydro-meteorological research.

4. Hydro-meteorological forecast and warning bulletins; hydro-meteorological situation notices.

5. Technical records of hydro-meteorological stations, works and measuring instruments.

6. Dossiers of grant, extension, invalidation and revocation of hydro-meteorological forecast and warning activity licenses.

7. Results of scientific research, programs and projects on hydro-meteorology; weather modification plans and results.

8. Legal documents and technical guidelines on hydro-meteorology.

Article 30. Archive of hydro-meteorological information and data

1. Hydro-meteorological information and data shall be preserved and archived for a long term.

2. Archive of hydro-meteorological information and data is a specialized archive which must comply with the law on archive.

3. Hydro-meteorological information and data prescribed in Clauses 1, 2 and 3, Article 29 of this Law shall be checked, classified and qualitatively assessed by state management agencies in charge of hydro-meteorology before being put into archive.

4. Hydro-meteorological information and data classified as state secrets shall be protected in accordance with the law on protection of state secrets.

5. The Ministry of Natural Resources and Environment shall organize archive and preservation of hydro-meteorological information and data in accordance with law.

Article 31. National hydro-meteorological database

1. The national hydro-meteorological database is a collection of all information and data prescribed in Article 29, and Clause 2, Article 34, of this Law nationwide, standardized according to national standards and digitalized for updating, management and exploitation via information technology systems.

2. The Minister of Natural Resources and Environment shall prescribe data sets and standards and organize the building and management of the national hydro-meteorological database.

Article 32. Exploitation and use of hydro-meteorological information and data

1. Agencies, organizations and individuals may exploit the national hydro-meteorological database in accordance with this Law and relevant laws.

2. Hydro-meteorological information and data used in socio-economic development programs, master plans, plans and projects must be of clear origin, provided and certified by agencies, organizations and individuals prescribed in Article 39 of this Law, or provided from the national hydro-meteorological database.

3. Competent state agencies shall, when appraising, verifying and assessing socio-economic development programs, master plans, plans or projects using hydro-meteorological information and data, appraise and verify the origin of hydro-meteorological information and data prescribed in Clause 2 of this Article.

4. Agencies, organizations and individuals exploiting hydro-meteorological information and data shall pay charges in accordance with law, except the cases prescribed in Clause 5 of this Article.

5. State agencies may exploit for free hydro-meteorological information and data for the following purposes:

a/ Announcement in the mass media not for profit;

b/ Support of natural disaster prevention and combat and assurance of national defense and security;

c/ Exchange with foreign countries and international organizations under treaties to which the Socialist Republic of Vietnam is a contracting party;

d/ Other purposes at the request of competent state agencies.

6. The Government shall detail this Article.

#### Chapter V

## CLIMATE CHANGE MONITORING

Article 33. Contents of climate change monitoring

1. Building, management and exploitation of climate change monitoring stations and databases.

2. Collection of hydro-meteorological information and data from the observation at national and exclusive-use hydro-meteorological stations and relevant information and data.

3. Development of a standard national climate set.

4. Analysis, assessment and monitoring of indications of climate change.

5. Assessment of climate change impacts on natural disasters, natural resources, the environment, eco-systems, living conditions, socio-economic activities and inter-sectoral, interregional and interdisciplinary issues; assessment of solutions to adaption to and mitigation of climate change impacts on socio-economic development.

6. Assessment of national climate.

7. Development of climate change scenarios.

8. The Minister of Natural Resources and Environment shall detail Clauses 5 and 6 of this Article.

Article 34. Climate change monitoring database

1. The climate change monitoring database is a collection of all information and data on climate change monitoring and a component of the national hydro-meteorological database.

2. Contents of climate change monitoring information and data:

a/ Hydro-meteorological information and data in the past and at present from the observation at national and exclusive-use hydro-meteorological stations;

b/Information and data on impacts of hydro-meteorological disasters and climate change on natural resources, the environment, eco-systems, living conditions and socio-economic activities;

c/ Information and data on greenhouse gas emissions and socio-economic activities related thereto;

d/ Information and data from the observation of ozone, ozone layer protection and management of ozone layer-depleting substances;

dd/ The standard national climate set;

e/ Results of assessment of national climate;

g/ Climate change scenarios in different periods;

h/ Technical records of climate change monitoring stations;

i/ Results of scientific research, programs and projects on climate change monitoring;

k/ Legal documents and technical guidelines on climate change monitoring.

3. Climate change monitoring information and data shall be archived, exploited and used under Articles 30 and 32 of this Law.

Article 35. Assessment of national climate

1. Contents of assessment of national climate:

a/ Current state of Vietnam's climate in the final year of the assessment period;

b/ Climate variation and climate change of Vietnam compared with the history and the previous assessment period and against the standard national and international climate sets;

c/ Impacts of climate and climate change on natural resources, the environment, ecosystems, living conditions and socio-economic activities;

d/ Results of response to climate change;

dd/ Level of suitability of climate change scenarios, the use of climate change scenarios in the response to climate change;

e/ Other related contents.

2. The period of national climate assessment is 10 years, which may be adjusted and supplemented when necessary.

Article 36. Climate change scenarios

1. Basic contents of a climate change scenario:

a/ The announcement of the Inter-governmental Committee on Climate Change and Vietnam's assessment of manifestations of climate change in the region and the world;

b/ Indications of climate change in Vietnam;

c/ Results of assessment of climate change scenarios in the previous period;

d/ Future changes in temperature, rainfall, humidity, sea level rise and other hydrometeorological factors in Vietnam according to the assumptions;

dd/ Other related contents.

2. A period of development and announcement of climate change scenarios is 5 years, which may be updated, adjusted and supplemented when necessary.

Article 37. Integration of results of climate change monitoring in strategies, master plans and plans

1. Contents of integration:

a/ Use of hydro-meteorological and climate change monitoring information and data in the assessment of natural conditions and environment of the areas for which strategies, master plans or plans are formulated;

b/ Use of results of analysis and assessment of indications of climate change and climate change impacts on natural disasters, natural resources, the environment, eco-systems, living conditions, socio-economic activities and inter-sectoral, inter-regional and interdisciplinary issues in order to identify long-term objectives of strategies, master plans and plans;

c/ Use of results of analysis and assessment of solutions to response to climate change in the identification of socio-economic targets in strategies, master plans and plans.

2. Objects of integration:

Strategies, master plans and plans listed as those subject to strategic environmental assessment must integrate results of climate change monitoring at the same time with integrating the content of response to climate change in accordance with this Law and the environmental protection law.

3. Appraisal of the integration:

Appraisal of the integration of results of climate change monitoring in strategies, master plans and plans shall be conducted at the same time with the appraisal of strategic environmental assessment reports in accordance with the environmental protection law.

#### Chapter VI

## HYDRO-METEOROLOGICAL SUPPORT ACTIVITIES AND SERVICES

Article 38. Contents of hydro-meteorological support activities and services

1. Hydro-meteorological support is a not-for-profit public service, including:

a/ Providing hydro-meteorological and climate change monitoring information and data, climate change scenarios, hydro-meteorological forecast and warning news for state agencies and

organizations to formulate strategies, master plans and plans on socio-economic development and national defense and security assurance;

b/ Providing hydro-meteorological disaster forecast and warning news for natural disaster prevention and combat and search and rescue;

c/ Providing hydro-meteorological disaster forecast and warning news for communications agencies serving the community not for profit;

d/ Providing hydro-meteorological information and data and hydro-meteorological forecast and warning news to foreign countries and international organizations under treaties to which the Socialist Republic of Vietnam is a contracting party;

dd/ Other hydro-meteorological activities as requested by competent state agencies.

2. Hydro-meteorological service is a revenue-generating activity on the basis of agreement between service provider and user, including:

a/ Providing hydro-meteorological and climate change monitoring information and data and hydro-meteorological forecast and warning news upon requests outside the cases prescribed in Clause 1 of this Article;

b/ Developing and providing information and communications products on hydrometeorology and climate change;

c/ Guiding the use of information and data and application of scientific and technological research results on hydro-meteorology and climate change monitoring;

d/ Transferring results of scientific and technological researches into hydro-meteorology and climate change monitoring not funded by the state budget;

dd/ Constructing, installing, and instructing the operation of, hydro-meteorological works and measuring instruments;

e/ Building and supplying technical infrastructure facilities for hydro-meteorological forecast and warning and news transmission;

g/ Inspecting, calibrating, installing and repairing hydro-meteorological measuring instruments;

h/ Providing consultancy on hydro-meteorology and climate change monitoring;

i/ Training human resources for hydro-meteorology and climate change monitoring;

 $\mathbf{k}/$  Other activities related to hydro-meteorology and climate change monitoring upon requests.

Article 39. Agencies, organizations and individuals providing hydro-meteorological support and services

1. Public non-business hydro-meteorological agencies and organizations shall provide hydro-meteorological support as prescribed in Clause 1, Article 38 of this Law.

2. Public non-business hydro-meteorological organizations shall provide hydrometeorological services according to their functions and tasks defined by competent state agencies in accordance with this Law and relevant laws; may organize the implementation of investment projects in public-private partnership form in the hydro-meteorological field, and exploit hydro-meteorological products and services of other organizations and individuals on the basis of order placement or agreement in accordance with law.

Other organizations and individuals shall provide hydro-meteorological services in accordance with this Law and relevant laws.

Article 40. Rights and obligations of public non-business hydro-meteorological organizations, other organizations and individuals providing hydro-meteorological services

1. Public non-business hydro-meteorological organizations and other organizations and individuals providing hydro-meteorological services have the following rights:

a/ To have the right to provide hydro-meteorological services guaranteed by law;

b/ To exploit information and data from the national hydro-meteorological database;

c/ To sign contracts and enter into joint operation and association with domestic or foreign organizations and individuals to provide hydro-meteorological services;

d/ To participate in bidding for carrying out scientific research projects and subjects on hydro-meteorology funded by the state budget;

dd/ Organizations and individuals have the right to set prices of hydro-meteorological products and services they produce or provide and determine other costs in accordance with law;

e/ Other rights as prescribed by law.

2. Public non-business hydro-meteorological organizations, other organizations and individuals providing hydro-meteorological services have the following obligations:

a/ To take responsibility before law and their clients for the quality of hydro-meteorological services they provide;

b/ To submit to the management by state management agencies in charge of hydrometeorological and relevant fields;

c/ To pay taxes, charges and fees prescribed by law;

d/ To comply with requests of competent state agencies regarding reporting, examination, inspection and handling of violations in the provision of hydro-meteorological services in accordance with law.

## Chapter VII

#### WEATHER MODIFICATION

Article 41. Principles of weather modification

1. Weather modification may only be conducted in specific areas with appropriate natural conditions and infrastructure facilities for a specified period.

2. Weather modification may not obstruct or adversely affect socio-economic activities and national defense and security.

3. Agencies and organizations that conduct weather modification must have measures to ensure safety and minimize negative effects of weather modification activities.

4. Weather modification may only be conducted under approved plans, and publicly notified to the residents in the areas.

Article 42. Cases of weather modification

1. Weather modification to cause rain or increase rainfall.

2. Weather modification to reduce the intensity of rain or prevent rain.

3. Weather modification to disperse or reduce the intensity of hail.

4. Weather modification to disperse or reduce the intensity of fog.

Article 43. Agencies and organizations allowed to conduct weather modification

1. Public non-business hydro-meteorological organizations.

2. Vietnamese science and technology organizations and economic organizations that have adequate capability, scientific and technological qualification and technical staffs suitable to weather modification activities.

3. Foreign agencies or organizations entering into joint operation or association with organizations prescribed in Clauses 1 and 2 of this Article.

Article 44. Making and approval of weather modification plans and implementation monitoring

1. Agencies or organizations that wish to conduct weather modification shall make plans and send them to the Ministry of Natural Resources and Environment for appraisal and approval according to its competence or for submission to the Prime Minister for approval.

2. A weather modification plan must have the following basic contents:

a/ The purpose of weather modification as prescribed in Article 42 of this Law;

b/ Project area where the weather will be modified;

c/ Estimated time of modifying the weather;

d/ Measures of modifying the weather;

dd/ Agency or organization expected to modify the weather;

e/ Plan to ensure safety and minimize negative effects of weather modification activities.

3. Agencies or organizations proposing to conduct weather modification shall collect opinions of residents in the area to be directly affected on the weather modification plan.

4. The Ministry of Natural Resources and Environment shall assume the prime responsibility for, and coordinate with the Ministry of National Defense, the Ministry of Public Security and the Ministry of Science and Technology in, appraising weather modification plans.

5. The Prime Minister shall approve weather modification plans in the cases prescribed in Clauses 1, 2 and 3, Article 42 of this Law.

6. The Ministry of Natural Resources and Environment shall approve weather modification plans in the cases prescribed in Clause 4, Article 42 of this Law.

7. The Ministry of Natural Resources and Environment shall assume the prime responsibility for, and coordinate with the Ministry of National Defense, the Ministry of Public Security, the Ministry of Science and Technology and related agencies in, supervising weather modification activities.

8. The Minister of Natural Resources and Environment shall detail Clauses 1, 2 and 3 of this Article.

## Chapter VIII

## INTERNATIONAL COOPERATION ON HYDRO-METEOROLOGICAL ACTIVITIES

Article 45. Principles of international cooperation on hydro-meteorological activities

1. Respecting the independence, sovereignty and territorial integrity and ensuring the interests of the country.

2. Guaranteeing the legitimate rights and interests of the country under treaties to which the Socialist Republic of Vietnam is a contracting party.

3. Promoting integration and heightening the position of Vietnam in international organizations on hydro-meteorology and climate change.

Article 46. Contents of international cooperation on hydro-meteorological activities

1. Exchanging hydro-meteorological and climate change monitoring information and data with international organizations and foreign organizations and individuals.

2. Participating in observation, forecast, investigation, survey, scientific research and technology transfer in hydro-meteorology and climate change monitoring under multilateral, bilateral, regional and global cooperation programs and projects.

3. Cooperating and exchanging specialists; training and developing high-quality human resources, and training personnel in foreign countries and international organizations on hydrometeorology and climate change.

4. Organizing and implementing other activities of international cooperation on hydrometeorology and climate change.

Article 47. Agency acting as the focal point of international cooperation on hydrometeorological activities

The Ministry of Natural Resources and Environment shall act as the focal point of international cooperation on hydro-meteorological activities.

Article 48. Exchange and provision of hydro-meteorological and climate change monitoring information and data and with international organizations and foreign organizations and individuals

1. The exchange and provision of hydro-meteorological and climate change monitoring information and data with international organizations and foreign organizations and individuals must comply with treaties to which the Socialist Republic of Vietnam is a contracting party.

2. The exchange and provision of hydro-meteorological and climate change monitoring information and data with international organizations and foreign organizations and individuals not governed by treaties to which the Socialist Republic of Vietnam is a contracting party are subject to permission by competent state agencies.

3. The Government shall detail Clause 2 of this Article.

## Chapter IX

## STATE MANAGEMENT OF HYDRO-METEOROLOGICAL ACTIVITIES

Article 49. Contents of state management of hydro-meteorological activities

1. Formulating, promulgating, and organizing implementation of, legal documents, policies, strategies, master plans, plans, technical regulations, professional processes, and economic-technical norms on hydro-meteorology and climate change monitoring.

2. Managing hydro-meteorological station networks, observation, forecast, warning, transmission and broadcasting of forecast and warning news; exploitation and use of information and data; hydro-meteorological support and services; weather modification and climate change monitoring.

3. Organizing law and information dissemination, communication, education and raising of community awareness; investment in scientific and technological research; training and development of human resources for hydro-meteorology and climate change.

4. Guiding the use of hydro-meteorological and climate change monitoring information and data in socio-economic development strategies, master plans, plans, programs and projects; integration of climate change monitoring results in strategies, master plans and plans.

5. Granting, extending, invalidating and revoking hydro-meteorological forecast and warning activity licenses.

6. Carrying out international cooperation on hydro-meteorological activities.

7. Conducting inspection and examination and handling of violations of the law on hydrometeorology; settling complaints and denunciations related to hydro-meteorology.

Article 50. Responsibilities of the Government

The Government shall uniformly perform the state management of hydro-meteorological activities nationwide.

Article 51. Responsibilities of the Minister of Natural Resources and Environment

1. To take responsibility to the Government for performing the state management of hydrometeorological activities nationwide.

2. To assume the prime responsibility for formulating and submitting to competent state agencies for promulgation, and organize the implementation of, legal documents, national strategies, master plans, plans, programs, schemes and projects on hydro-meteorology and climate change monitoring.

3. To formulate and promulgate according to his/her competence, and organize the implementation of, legal documents, technical regulations, professional processes and economic-technical norms on hydro-meteorology and climate change monitoring.

4. To manage and implement the master plan on the network of national hydrometeorological stations; to organize the protection of hydro-meteorological works and their technical corridors in the network of national hydro-meteorological works.

5. To manage and organize the implementation of observation, investigation and survey; forecast and warning; transmission and broadcasting of hydro-meteorological forecast and warning news; archive, exploitation and use of hydro-meteorological and climate change monitoring information and data.

6. To develop and submit to competent authorities for promulgation, and organize the implementation of, mechanisms and policies on hydro-meteorological activities.

7. To manage, guide and organize the carrying out of hydro-meteorological support activities and services.

8. To organize law and information dissemination, communication, education and raising of community awareness about hydro-meteorology and climate change; to invest in scientific and technological research; to train and develop human resources for hydro-meteorology and climate change.

9. To develop and manage the national hydro-meteorological database.

10. To manage and guide the exploitation and use of hydro-meteorological and climate change monitoring information and data in the formulation and implementation of socioeconomic strategies, master plans, plans, programs and projects; the integration of climate change monitoring results in strategies, master plans and plans.

11. To assume the prime responsibility for, and coordinate with other ministries, sectors and localities in, assessing the national climate; to develop, and guide the implementation of, climate change scenarios.

12. To organize appraisal, approval and monitoring of the implementation of weather modification plans according to his/her competence.

13. To grant, extend, invalidate and revoke hydro-meteorological forecast and warning activity licenses; to manage the quality of hydro-meteorological measuring instruments in accordance with law.

14. To propose to the Government and Prime Minister the participation in international organizations and conclusion or accession to treaties on hydro-meteorology and climate change; to assume the prime responsibility for international cooperation on hydro-meteorological activities.

15. To conduct inspection and examination and handle violations of the law on hydrometeorology; to settle complaints and denunciations related to hydro-meteorology according to his/her competence.

Article 52. Responsibilities of ministers and heads of ministerial-level agencies

1. Ministers and heads of ministerial-level agencies shall perform the tasks prescribed in this Law and coordinate with the Minister of Natural Resources and Environment in organizing the implementation of the Law on Hydro-Meteorology within the ambit of their management; annually send reports on hydro-meteorological activities under their management to the Ministry of Natural Resources and Environment for summarization and reporting to the Government.

2. Responsibilities of ministers and heads of ministerial-level agencies:

a/ The Minister of Agriculture and Rural Development shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, guiding agencies, organizations and individuals operating in agriculture and rural development in exploiting and providing hydro-meteorological information and data and forecast and warning news and climate change scenarios in natural disaster prevention and combat and building and development of agriculture and rural areas; formulate and promulgate technical regulations on construction, management and operation of natural disaster prevention and combat works in climate change conditions;

b/ The Minister of National Defense shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, promulgating regulations on exchange of hydro-meteorological information and data between the network of exclusiveuse hydro-meteorological stations serving national defense and the network of national hydro-meteorological stations; and coordinate in the management and supervision of weather modification activities;

c/ The Minister of Public Security shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, promulgating regulations on exchange of hydro-meteorological information and data between the network of exclusive-use hydro-meteorological stations serving national security and the network of national hydro-meteorological stations; and coordinate in the management and supervision of weather modification activities;

d/ The Minister of Information and Communications shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, planning and prioritizing allocation of frequencies to serve hydro-meteorological and climate change monitoring work in accordance with this Law and the law on radio frequency; formulate strategies on development of synchronous telecommunications infrastructure, information technology and planning telecommunications resources serving hydro-meteorological activities; direct the publication of hydro-meteorological and climate change monitoring information and data in the mass media in accordance with this Law and the press law;

dd/ The Minister of Transport shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, guiding agencies, organizations and individuals operating in the field of transport in exploiting and providing hydro-meteorological information and data, hydro-meteorological forecast and warning news and climate change scenarios; promulgate regulations on the use and exchange of domestic and international hydrometeorological information and data to serve meteorological forecast and warning activities to meet the requirements of management of civil flight assurance services; promulgating technical regulations on the provision of aviation meteorological services in accordance with this Law and the civil aviation law;

e/ The Minister of Industry and Trade shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, guiding agencies, organizations and individuals operating in the field of industry and trade in exploiting and using hydro-meteorological information and data, hydro-meteorological forecast and warning news and climate change scenarios in constructing, managing, exploiting and operating hydropower works and other works under his/her management;

g/ The Minister of Construction shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in guiding agencies, organizations and individuals operating in the field of construction in exploiting and using hydro-meteorological information and data, hydro-meteorological forecast and warning news and climate change scenarios in planning and constructing urban centers, industrial parks and concentrated residential quarters, and promulgate technical regulations on construction suitable to hydro-meteorological and climate change conditions;

h/ The Minister of Science and Technology shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, appraising and announcing national standards on hydro-meteorology and climate change; and coordinate in managing and supervising weather modification activities;

i/ The Minister of Education and Training shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, directing and guiding education and training institutions in developing and implementing education and training programs and materials on hydro-meteorological activities and their role;

k/ Other ministers and heads of ministerial-level agencies shall assume the prime responsibility for, and coordinate with the Minister of Natural Resources and Environment in, guiding, examining and urging agencies, organizations and individuals under their management to implement regulations on the exploitation and use of hydro-meteorological information and data, hydro-meteorological forecast and warning news, climate change scenarios and climate change monitoring results in formulating and implementing their sectoral development strategies, master plans and plans.

Article 53. Responsibilities of People's Committees at all levels

1. Provincial-level People's Committees shall:

a/ Formulate and promulgate according to their competence, and organize the implementation of, legal documents on hydro-meteorology and climate change monitoring;

b/ Submit to provincial-level People's Councils plans on allocation of budget estimates and management and use of budgets in accordance with law to ensure implementation of hydro-meteorological activities serving local socio-economic development and natural disaster prevention and combat requirements;

c/ Grant, extend, invalidate and revoke hydro-meteorological forecast and warning activity licenses of organizations and individuals in accordance with law;

d/ Manage hydro-meteorological observation, forecast and warning activities and information and data and provision of hydro-meteorological services in their localities;

dd/ Supervise and evaluate the exploitation and use of hydro-meteorological forecast and warning news serving socio-economic development and natural disaster prevention and combat in their localities;

e/ Organize and direct the appraisal, verification and evaluation of the exploitation and use of hydro-meteorological information and data in socio-economic development strategies, master plans, plans, programs and projects; and the integration of climate change monitoring results in strategies, master plans and plans in their localities;

g/ Organize the assessment of climate change impacts and work out solutions to respond to climate change in the fields and areas under their management;

 $\rm h/\,Organize$  the transmission and broadcast of hydro-meteorological forecast and warning news under their management;

i/ Manage and archive hydro-meteorological information and data and build hydrometeorological databases under their management;

k/ Disseminate and educate in the law and organize public information on hydrometeorology and climate change; implement measures to develop hydro-meteorological support activities and services in their localities;

l/ Carry out activities of international cooperation on hydro-meteorological activities according to their competence;

m/ Conduct inspection and examination and settle complaints and denunciations related to hydro-meteorology according to their competence;

n/ Handle according to their competence acts infringing upon technical corridors of hydrometeorological works and other violations of the law on hydro-meteorology in their localities;

o/ Report on the state management of hydro-meteorological activities in their localities to the Ministry of Natural Resources and Environment.

2. People's Committees of rural districts, urban districts, towns, provincial cities and cities of centrally run cities shall:

a/ Monitor the observance of the law on hydro-meteorology in their localities;

b/ Monitor, evaluate, exploit and use hydro-meteorological forecast and warning news serving socio-economic development and natural disaster prevention and combat in their localities;

c/ Disseminate and educate in the law and organize public information on hydrometeorology; join in settling and handling violations related to hydro-meteorology according to their competence;

d/ Summarize and report on hydro-meteorological activities and damage caused by hydrometeorological disasters in their localities to their immediate superior People's Committees;

dd/ Join in settling complaints and denunciations related to the exploitation and protection of hydro-meteorological works in their localities;

e/ Perform tasks of state management of hydro-meteorological activities as decentralized or authorized by superior state management agencies.

3. Commune-level People's Committees shall:

a/ Join in protecting hydro-meteorological works in their localities;

b/ Disseminate and educate in the law and organize public information on hydrometeorology; join in settling and handling violations related to hydro-meteorology according to their competence; c/ Summarize and report on hydro-meteorological activities and damage caused by hydrometeorological disasters in their localities to their immediate superior People's Committees;

d/ Join in settling complaints and denunciations related to the operation and protection of hydro-meteorological works in their localities;

dd/ Perform tasks of state management of hydro-meteorological activities as decentralized or authorized by superior state management agencies.

## Chapter X

## IMPLEMENTATION PROVISIONS

Article 54. Addition of the list of conditional business investment sectors and trades in the Investment Law

To add to Appendix 4 on the list of conditional business investment sectors and trades to Investment Law No. 67/2014/QH13 the following:

"268. Hydro-meteorological forecast and warning."

Article 55. Transitional provisions

1. Dossiers received by competent state agencies for settlement according to administrative procedures for hydro-meteorological activities before this Law takes effect shall be considered and settled according to the law effective at the time of receipt, except the case prescribed in Clause 2 of this Law.

2. No operation license shall be granted to exclusive-use hydro-meteorological works under the Ordinance on Exploitation and Protection of Hydro-meteorological Works from the promulgation date of this Law.

3. Within 12 months after this Law takes effect, agencies, organizations and individuals currently managing and exploiting exclusive-use hydro-meteorological stations shall report on the current state of these stations as follows:

a/Ministries, ministerial-level agencies and government-attached agencies shall report to the Ministry of Natural Resources and Environment;

b/ Organizations and individuals shall report to provincial-level People's Committees of localities where the stations are located for summarization and reporting to the Ministry of Natural Resources and Environment.

## Article 56. Effect

1. This Law takes effect on July 1, 2016.

2. The 2014 Ordinance on Operation and Protection of Hydro-meteorological Works ceases to be effective on the effective date of this Law.

#### Article 57. Detailing provision

The Government and competent agencies shall detail the articles and clauses in the Law as assigned.

This Law was passed on November 23, 2015, by the XIII<sup>th</sup> National Assembly of the Socialist Republic of Vietnam at its 10<sup>th</sup> session.-

Chairman of the National Assembly NGUYEN SINH HUNG