

**THE GOVERNMENT**

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No. 39/2010/ND-CP

**SOCIALIST REPUBLIC OF VIET NAM**

**Independence - Freedom – Happiness**

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*Hanoi, April 07, 2010*

**DECREE**

**ON MANAGEMENT OF URBAN UNDERGROUND CONSTRUCTION SPACE**

**THE GOVERNMENT**

*Pursuant to the December 25, 2001 Law on Organization of the Government;*

*Pursuant to the November 26, 2003 Law on Construction;*

*Pursuant to the June 17, 2009 Law on Urban Planning;*

*At the proposal of the Minister of Construction,*

**DECREES:**

**Chapter I**

**GENERAL PROVISIONS**

**Article 1. Scope of regulation and subjects of application**

1. This Decree provides for the management of underground construction space in urban centers in Vietnam.
2. Domestic and foreign organizations and individuals engaged in activities related to underground construction space in urban centers in Vietnam shall abide by the provisions of this Decree and other relevant provisions of law.

**Article 2. Interpretation of terms**

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

1. Urban underground construction space means the subterranean space used for the construction of urban underground works.
2. Management of urban underground construction space covers the underground construction space planning and activities related to the construction of urban underground works
3. Urban underground construction space planning means the organization of subterranean construction space for the construction of underground works.
4. Urban underground works means those built underground in urban centers, including underground public facilities, underground traffic works, underground key technical works and underground sections of works built on the ground, underground wires, cables and technical pipes and technical trenches and tunnels.
5. Underground public facilities means works built underground to serve public activities.
6. Underground traffic works means underground railway works, underground railway terminals, road tunnels, pedestrians' tunnels and connected support facilities (including road sections connecting underground portions with the ground surface).

7. Underground technical key works means underground technical infrastructure facilities including water supply stations, wastewater treatment stations, transformer stations and gas stations, which are built underground.
8. Underground wire, cable and technical pipeline works means underground water or energy supply pipelines, water drainage works: power transmission lines and communications lines which are built underground.
9. Underground sections of works built on the ground means ground floors (if any) and underground sections of works.
10. Technical tunnels mean underground works running in lines which are of sizes big enough for humans to install, repair and maintain of underground equipment and pipelines.
11. Technical trenches means underground works running in lines which are of small sizes for installation of wires, cables and technical pipelines.
12. Technical culverts, tanks means the systems of pipes and cable tanks for the installation of underground communications, telecommuni-cations wires and cables signal transmission cables, television, power supply and lighting cables.

### **Article 3. Principles on management of urban underground construction space**

1. The Government shall perform the unified management on the basis of assigning provincial-level People's Committees to manage urban underground construction space in areas under their respective management.
2. Urban underground construction space must be planned, built, managed and used. On-ground urban development and planning must be closely associated with the safe and efficient use of underground space.
3. The use of underground space for the construction of underground works must ensure thrifty land use, environmental protection and security as well as defense requirements.
4. Investors in new urban centers, new residential quarters and newly built, renovated or expanded thoroughfares shall invest in the construction of technical culverts and tanks or technical trenches and tunnels for the installation of technical wires and pipes under approved planning. For old or renovated urban centers, provincial-level People's Committees shall work out plans for investment in the construction of technical culverts and tanks or technical trenches and tunnels for incrementally laying underground overhead wires and cables.
5. The construction of urban underground works must comply with the following regulations:
  - a/ Urban plannings, regulations on under-ground construction and construction permission;
  - b/ The construction must not go beyond the construction boundaries or land areas, determined in land allocation or land lease decisions of competent state agencies. In case the construction needs to go beyond the construction boundaries or land areas as determined (excluding sections for technical connections of the wire system or underground pipelines), permission of competent state agencies is required;
  - c/ To ensure safety for communities, works themselves and adjacent works: not to affect the use, exploitation and operation of adjacent works as well as works already existing or identified in urban planning.

#### **Article 4. Ownership of underground construction works**

The grant of certificates of underground construction work ownership complies with legal provisions on the grant of certificates of land use rights and house and land-attached asset ownership.

#### **Article 5. Land use for construction of urban underground works**

1. The use of land for the construction of urban underground works must conform to urban planning and land use planning approved by competent authorities.
2. Provincial-level People's Committees shall decide to permit domestic organizations or foreign organizations and individuals to use land for the construction of urban underground works according to regulations.
3. The use of land for construction of urban underground works (excluding underground sections of works built on the ground surface) complies with the following provisions:
  - a/ Domestic and foreign organizations and individuals that are leased land by the State shall pay land rents for cases of construction of urban underground works for business purposes;
  - b/ Domestic and foreign organizations and individuals that are leased land by the State will be considered for land rent exemption or reduction, for cases of construction of urban underground works for non-business purposes.
4. The Ministry of Natural Resources and Environment shall assume the prime responsibility for, and coordinate with concerned ministries and sectors in, formulating mechanisms for management and use of land for the construction of urban underground works, and submit them to the Prime Minister for decision.

#### **Article 6. Supports and preferences for construction of urban underground works**

1. The State encourages organizations and individuals to participate in planning underground work construction space; to invest in the construction of underground works in appropriate investment forms.
2. Types of urban underground works to be encouraged for construction investment include:
  - a/ Underground traffic works and underground car parks;
  - b/ Key underground technical works;
  - c/ Technical culverts and tanks, technical trenches and tunnels.
3. Organizations and individuals investing in the construction of underground works defined in Clause 2 of this Article are entitled to investment supports and preferences under current provisions of law.
4. The Ministries of Finance; Natural Resources and Environment; and Planning and Investment shall base on their respective functions and tasks to guide the implementation of Clause 3 of this Article.

#### **Article 7. Urban underground construction regulations and standards**

1. Organizations and individuals operating in the fields of underground construction space planning and construction of underground works shall comply with relevant technical regulations promulgated by competent state agencies.

2. The Ministry of Construction and ministries with specialized construction shall organize the formulation of national construction standards; promulgate technical regulations on construction of underground works according to their respective functions and tasks assigned by the Government.

3. The application of foreign underground construction standards must comply with legal provisions on application of foreign construction standards in construction activities in Vietnam.

#### **Article 8. Establishment of databases and archive of files on urban underground construction works**

1. The database on urban underground works covers:

a/ Data on the current state of urban underground works;

b/ Data on urban underground construction space planning;

c/ Other data related to the management of urban underground construction space.

2. Files on the current state of underground works and underground construction space planning will be archived in accordance with the law on archive. Management agencies at all levels are encouraged to apply advanced technologies to the management of databases and supply of information on urban underground works.

3. The Ministry of Construction shall guide the establishment of the database on urban underground works.

4. Provincial-level People's Committees shall direct the establishment of databases to serve the management of, planning on, investment in, and construction of, urban underground works in areas under their respective management.

5. State management agencies in charge of construction in localities shall establish databases; archive files and provide information to requesting organizations and individuals under law.

6. Domestic and foreign owners of urban underground works shall supply data on underground works under their management to local state agencies in charge of construction for the establishment of databases on urban underground construction works.

#### **Article 9. Prohibited acts**

1. Building urban underground works in violation of urban planning or underground construction space planning; in violation of construction permits or without construction permits.

2. Infringing upon safety corridors and the scope of protection of underground works.

3. Participating in construction activities but failing to fully meet the capability conditions as prescribed by the law on construction.

4. Breaching regulations on management, exploitation, use and maintenance of underground works.

5. Other acts in violation of laws on construction, urban planning and of relevant law.

### **Chapter II**

## **URBAN UNDERGROUND CONSTRUCTION SPACE PLANNING**

### **Article 10. Provisions on urban underground construction space planning**

1. Urban underground construction space planning constitutes a content of an urban plan. The contents of urban underground construction space planning in an urban plan comply with the law on urban planning.
2. For urban centers with approved urban plannings or in which underground works, need to be constructed but have not yet been identified in the approved plans, the formulation of general plannings or detailed plannings on underground construction space shall be considered and decided by provincial-level People's Committees.
3. General plannings on underground construction space shall be formulated for urban centers; detailed plannings on underground construction space shall be formulated for urban zones or for use as a basis for the formulation of investment projects on construct of underground works. The planning contents comply with the provisions of Articles 12 and 13 of this Decree.
4. The appraisal and approval of general plannings and detailed plannings on urban underground space shall comply with the law on urban planning.

### **Article 11. Requirements on urban underground construction space planning**

Underground construction space planning must ensure rational, thrifty and efficient use of land and compatible and synchronous connections of underground works and between underground works and ground works; satisfy the requirements on protection of the environment and ground water sources and safety of underground works and underground sections of on-ground works.

### **Article 12. Contents of urban underground construction space planning**

1. Analyzing and assessing the natural, geological and hydrological conditions of works; the current state of construction of urban on-ground and underground works.
2. Analyzing and assessing the general urban planning and the state of construction under the approved planning.
3. On the basis of urban space and technical infrastructure development orientations already identified in general urban plans:
  - a/ Forecasting urban underground space development and use demands;
  - b/ Zoning of functional underground space for the construction of underground works;
  - c/ Identifying areas where construction of underground works is restricted or banned;
  - d/ Identifying underground traffic systems, including route directions, locations and sizes of underground railway stations (if any); positions and sizes of automobile tunnels and areas projected for the construction of underground car parks;
  - e/ Identifying systems of technical tunnels and trenches, technical culverts and tanks on principal thoroughfares up to zone level;
  - f/ Identifying water supply or drainage pipelines of grades 1 and 2, power transmission lines of 22 kV or higher;
  - g/ Identifying areas for the construction of underground works and underground key technical infrastructure works;

h/Projected technical connections and spatial connections;

i/ Strategically evaluating the environment;

j/ Projected priority construction items and resources for implementation.

4. A planning file includes explanations and relevant legal documents; maps of current underground work systems and the urban underground construction space general planning.

### **Article 13. Contents of detailed underground construction space planning**

1. Analyzing and assessing the natural, geological and hydrological conditions of works: the current state of construction of on-ground and underground works; the provisions of the general planning and zoning planning related to the planned zone.

2. Determining the scope, boundaries, nature and use functions of space for the construction of underground works.

3. Determining specific locations, sizes and land use scopes of underground construction works.

4. Determining detailed locations of technical connections and spatial connections of works.

5. Strategically assessing the environment.

6. A planning file includes explanations and relevant legal documents; maps of the current state, maps of detailed planning on underground construction space and drawings describing the cross-sections of used underground space, which show a detailed vertical arrangement of underground works.

## **Chapter III**

### **CONSTRUCTION OF URBAN UNDERGROUND WORKS**

#### **SECTION I. PERMITS FOR CONSTRUCTION OF URBAN UNDERGROUND WORKS**

##### **Article 14. General provisions**

1. Before starting the construction of underground works, investors shall obtain construction permits, except cases of construction permit exemption under the law on construction.

2. The grant of permits for construction of underground works complies with relevant documents guiding the Construction Law, the Urban Planning Law and this Decree.

##### **Article 15. Permits for construction of underground wire lines, pipelines, technical trenches, culverts and tanks**

1. A dossier of application for a work construction permit comprise:

a/ An application for a construction permit;

b/ Any of the papers permitting the investment in work construction;

c/ The route direction agreement with the local planning management agency if such work is not yet identified in the approved urban planning;

d/ The design drawing showing the location, ground, cross-section and depth of the work; the plan of technical connections.

2. Competence to grant permits:

a/ Provincial-level People's Committees shall grant construction permits for underground wire lines, pipelines, technical trenches, culverts and tanks of grades I and II;

b/ Provincial-level People's Committees shall provide for the grant of permits for the construction of the remaining underground wirelines, pipelines, technical trenches, culverts and tanks.

3. The application for a construction permit and the construction permit are provided in Appendices I and II to this Decree (not printed herein).

**Article 16. Permits for the construction of underground traffic works, underground public facilities, tunnels and underground key technical infrastructure works**

Permits for the construction of underground traffic works, underground public facilities, tunnels and underground key technical infrastructure works comply with the law on construction.

**Article 17. Underground sections of on-ground construction works**

1. Upon grant of permits for the construction of on-ground works with underground sections, such a construction permit must specify the scope of underground sections, the number of ground floors, the total depth of the ground floors and subterranean sections of works.

2. The construction of underground sections must comply with construction permits and relevant provisions of this Decree.

**SECTION 2. URBAN UNDERGROUND WORK SURVEY AND DESIGN**

**Article 18. For wirelines, pipelines and technical trenches**

1. Survey requirements:

a/ Surveys must express the current topographical, geological and hydrological conditions and underground as well as on-ground works in order to serve designing and construction activities;

b/ The technical requirements on surveys prescribed in the technical regulations for each type of works must be met.

2. Construction designing requirements:

a/ To comply with urban and urban underground construction space planning approved by competent authorities. If the urban planning or urban underground construction space planning is not yet available, agreement of local planning management agency is required:

b/ To comply with technical regulations applicable to each type of works;

c/ Construction designing must ensure the synchronous arrangement of pipelines, wire and cable lines to subscribers, and load, suitable to the common technical infrastructure system of the urban center and describe appropriate processes of operation, use and maintenance of works;

d/ Designing consultancy must take into account and forecast the demands for use of wirelines, technical pipelines in order to determine the sizes of technical trenches or culverts and tanks suitable to urban development planning and plans.

**Article 19. For underground traffic works, underground public facilities, tunnels and underground key technical infrastructure works**

1. Construction survey requirements:

- a/ To adequately supply data, documents and technical parameters on underground works and existing on-ground works, geological and hydrological conditions of works, the possibility of existence of assorted poisonous gases in construction sites, which serve as grounds for determining the scope and depth of works, the selection of appropriate construction technologies with a view to ensuring safety for humans, works and adjacent works;
- b/ To forecast abnormalities of geological and hydrological conditions of works in order to work out appropriate handling measures in the designing and construction of underground works;
- c/ To ensure environmental sanitation and restore the ground to its original state upon completion of surveys.

2. Construction designing requirements:

- a/ To conform to geological and hydrological conditions of works;
- b/ To be synchronous, connections conformable to adjacent and on-ground works, to urban common technical infrastructure systems: to ensure safety, not affecting adjacent construction works; to combine with security and defense requirements when necessary; at the same time, to propose solutions to the preservation of trees and the protection of historical and cultural relics in construction sites (if any);
- c/ The design of architectural space inside the works (if any) must satisfy the requirements on utility, durability and beauty, suitable to cultural and historical characters of the locality where works are constructed:
- d/ The design of lighting, air-conditioning, ventilating, water supply and drainage, power supply, fire-protection, emergency exit and operation control systems in works must take into account types and grades of works as prescribed by the law on construction;
- e/ To meet anti-permeation, anti-corrosion and anti-erosion requirements;
- f/ To ensure the convenient use by disabled persons, ensure safe and quick exit upon occurrence of incidents;
- g/ To work out processes of work operation and maintenance and to set tasks of geo-technical observation.

**SECTION 3. CONSTRUCTION OF URBAN UNDERGROUND WORKS**

**Article 20. For underground wirelines, pipelines, technical trenches, culverts and tanks**

1. Prior to the construction of these works, investors shall notify the construction commencement to ward/township People's Committees of localities where underground works are constructed for coordinated inspection and supervision of the construction process.
2. Construction contractors shall work out construction measures to ensure safety for normal operation of wire and cable lines, underground works, other connections and ensure traffic safety and environmental sanitation.
3. Contractors to construct wirelines, pipelines, technical trenches, culverts and tanks must ensure the safety, quality and construction progress of works.



## **Article 21. For underground traffic works, public facilities, tunnels and key technical infrastructure works**

1. Prior to the construction of works, investors shall determine the current conditions of existing underground works in construction zones in order to work out appropriate handling measures.
2. Construction contractors shall work out construction measures for approval by investors or their representatives.
3. To ensure safety for humans and works, minimally affecting routine activities of the urban center, adjacent and on-ground works; to work out measures to ensure environmental sanitation, especially against the pollution of ground water and the urban geological environment.
4. To work out plans and options to overcome possible incidents in the course of construction such as weak soil layer, water-containing layer, poisonous gas, fire and explosion, landslides, raisings and cracks in order to ensure safety for humans, construction equipment and works.
5. To strictly observe the work process and order and regularly inspect safety conditions in the course of construction. Upon occurrence of abnormal incidents, construction contractors shall notify them to investors and concerned parties for appropriate handling measures.

## **Article 22. Test for acceptance, certification of force-bearing safety and certification of quality conformity of urban underground construction works**

1. Urban underground construction works, before being put to use, must be tested for acceptance according to regulations.
2. The prior-acceptance test, acceptance and issue of certificates of force-bearing safety of urban underground construction works shall comply with the law on construction.
3. Construction works or work items, regardless of their types and grades, must be certified for quality standard conformity when so requested by local state management agencies in charge of construction or investors or owners.

## **SECTION 4. UNDERGROUND LAYING OF OVERHEAD WIRES AND CABLES**

### **Article 23. Principles for laying underground overhead wires and cables**

1. To comply with urban planning, underground construction space planning, underground laying plans and design files approved by competent authorities.
2. To comply with technical regulations of related sectors.
3. The State encourages the underground laying of overhead wires and cables in urban centers. Organizations and individuals participating in the underground laying of overhead wires and cables in urban centers are entitled to investment supports and preferences under current laws.
4. The designing, construction, re-arrangement and underground laying of overhead wires and cables along streets must satisfy the following requirements:
  - a/ To ensure safety for humans, works, adjacent works and general safety for related technical infrastructure systems;
  - b/ To ensure their connections with the common urban wire and cables systems;
  - c/ To ensure common use in technical culverts, tanks, trenches or tunnels for thrifty use of underground space.

5. For streets already built with technical culverts, tanks or technical trenches and tunnels, on-ground culverts must not be built. Provincial-level People's Committees shall promulgate regulations on the common use of systems of technical culverts, tanks, trenches or tunnels in areas under their respective management.

#### **Article 24. Underground laying of overhead wires and cables**

1. The underground laying of overhead cables along streets can be carried out in any of the following forms: technical culverts and tanks; technical trenches and tunnels.

2. Constructors for underground laying of overhead wires and cables must ensure work safety, quality and construction schedule.

3. Investors shall coordinate with owners of overhead wire or cable systems in recovering unused posts, overhead wires and cables. Local construction management agencies shall inspect the recovery thereof.

4. Organizations and individuals exploiting or using overhead wire or cable lines in urban centers shall coordinate, participate in, and contribute funds to, the underground laying of overhead wires and cables under the general plans of provincial-level People's Committees.

5. Provincial-level People's Committees shall organize and direct the formulation and implementation of plans on underground laying of overhead wires and cables in areas under their respective management.

### **Chapter IV**

#### **ORGANIZATION OF CONNECTION, GEO-TECHNICAL OBSERVATION AND MAINTENANCE OF UNDERGROUND WORKS**

##### **SECTION I. CONNECTION OF URBAN UNDERGROUND WORKS**

#### **Article 25. Technical connection**

1. Technical connection means the connection between underground wirelines, cable lines, technical pipelines; technical trenches and tunnels.

2. Requirements on technical connection:

a/ To conform to approved urban planning or urban underground construction space planning;

b/ To conform to each work's use demand;

c/ To ensure synchronism;

d/ To ensure the technical requirements prescribed for each type of works.

#### **Article 26. Spatial connection**

1. Spatial connection means the creation of a space for connection between underground construction works and adjacent works, ensuring activities of people and machinery.

2. Requirements on spatial connection

a/ To conform to approved urban planning or urban underground construction space planning. In case the urban planning or urban underground construction space planning is not yet available, approval of the local planning management agencies is required;

- b/ To ensure safety for people and works themselves and adjacent works;
- c/To ensure convenience for use. exploitation and emergency exit when necessary.

#### **Article 27. Connection agreement**

Upon designing the construction of underground works, investors shall reach agreement with units managing the operation of urban technical infrastructure works or work owners or users for spatial connection (if any).

#### **Article 28. Implementation of connection**

Prior to work connection, investors shall notify connection plans and schedules to agencies and units agreeing with the connection for supervision and coordinated implementation.

### **SECTION 2. GEO-TECHNICAL OBSERVATION AND MAINTENANCE OF UNDERGROUND WORKS**

#### **Article 29. Geo-technical observation of underground works**

1. Underground traffic works, public facilities, tunnels and key technical infrastructure works must be subject to geo-technical observation.

2. Requirements on geo-technical observation:

a/ Ggeo-technical observation shall be carried out according to regulations throughout the process of construction, exploitation and use of underground works:

b/ Geo-technical observation covers the observation of underground works themselves, the geological environment and adjacent works:

c/ Geo-technical observation shall be carried out strictly according to observation plans already approved by investors or use managers;

d/ When observing abnormalities, construction contractors shall notify them to investors or use managers and designing agencies for timely handling measures.

#### **Article 30. Requirements on underground work maintenance**

1. Underground construction works must be maintained under the law on construction.

2. Underground traffic works; underground public facilities; tunnels and key technical infrastructure works must be maintained according to regulations (regular and periodical maintenance).

3. Underground wirelines, pipelines and technical trenches must be periodically maintained.

4. Upon carrying out maintenance, attention must be paid to close examination of work connection systems; air-ventilation control, lighting, explosion- and fire-protection and environmental protection equipment (if any).

#### **Article 31. Responsibilities of related agencies in the maintenance of underground works**

1. Work owners or use managers shall:

a/ Organize the maintenance of underground works;

b/ Maintain underground works under the instructions and regulations of designing contractors, materials, technological equipment and work equipment supply contractors and observe relevant regulations and standards;

c/ Be held responsible before law for the quality of construction works if they are degenerated due to non-compliance with the prescribed work maintenance process;

d/ Periodically report on the maintenance and operation of underground works to local construction state management agencies.

2. Local construction state management agencies shall organize periodical and extraordinary inspections of work maintenance activities of owners or use managers of underground works.

## **Chapter V**

### **ORGANIZATION OF IMPLEMENTATION**

#### **Article 32. Effect**

1. This Decree takes on May 25. 2010.

2. This Decree replaces the Government's Decree No. 41/2007/ND-CP of March 22. 2007. on urban underground construction.

#### **Article 33. Organization of implementation**

1. Ministers, heads of ministerial-level agencies, heads of government-attached agencies, chairpersons of provincial-level People's Committees shall, within the ambit of their tasks and powers, organize the implementation of this Decree.

2. The Ministry of Construction shall assume the prime responsibility for, and coordinate with concerned ministries and sectors in. guiding, monitoring and inspecting the implementation of this Decree.-

**ON BEHALF OF THE GOVERNMENT  
PRIME MINISTER**

**Nguyen Tan Dung**