

Based on article 15, par. 4 of the Railway Law (Narodne Novine no. 123/03 and 30/04), the Minister of the Sea, Tourism, Transport and Development has issued

Ordinance on Railway Infrastructure

General provisions

Article 1

- (1) This Rule Book regulates the component parts of the railway infrastructure for purpose of the management and economy of the railway infrastructure and for purpose of its construction, modernization and maintenance in line with the National Program of the Railway Infrastructure.
- (2) Management and economy of the railway infrastructure is first of all based on the principles and criteria arising from its basic function, i.e. safe, orderly and undisturbed development of the railway traffic, its maintenance, technologic improvement and development.

Railway Infrastructure

Article 2

The railway infrastructure is a part of the railway system, representing in itself a special system.

Article 3

Railway infrastructure is a public property in a general use owned by the Republic of Croatia and governed as well as managed in accordance with its status.

Article 4

Railway infrastructure or a part of it can temporarily or permanently be out of the use in the public transport.

Article 5

Railway infrastructure consists of the land of the infrastructural belt with air space above it at the height up to 14 m, and railway infrastructure subsystems (civil engineering, electro-power, traffic-management and signalling-safety subsystems and other functional parts as well as railway infrastructure equipment).

Article 6

(1) With respect to this Rule Book, the component part of the railway infrastructure is not considered to be:

- Infrastructure with belonging plants and equipment in the workshops for the building and maintenance of locomotives and wagons
- Infrastructure with belonging plants and equipment at the industrial and other trucks which are not in a general use
- All other infrastructure to be used for railway needs, and which is not a public property in a general use.

Article 7

In a technical sense of this Rule Book, a railway line is made of the parts of infrastructural subsystems necessary for a safe, orderly and undisturbed taking place of the railway traffic, in line with the defined conditions, range and technology. A railway line is consisted of the land below railway line with the railway belt and other land to serve for the use and function of these parts of infrastructural subsystems as well as the air space above the railway line at the height of 12 m respectively 14 m with a power transmission line of more than 220 kV, counting above the top edge of rails.

Article 8

The railway line, in the traffic-technology sense of this Rule Book, one considers the railway line as a whole, which is consisted of railway stations and the open railway section with other official places (stations, departure tracks, etc.).

Infrastructural belt

Article 9

The infrastructural belt, in the sense of this Rule Book, is the land below railway line, the land below other functional parts of the railway infrastructure, and the land necessary for technologic improvements and the development of infrastructural capacities. The infrastructural belt is made of the belonging air space too.

Article 10

- (1) The borders of infrastructural belt is defined by the Manager of the Infrastructure based on the regulations referring to the railway system in general, to the safety of the railway traffic, development of the space and construction, and that, in conformity with the physical planning documents of the Republic of Croatia.
- (2) Borders of the infrastructural belt must be in that sense defined topographically, marked and entered into the cadastral books.

- (3) Dynamics, priorities and times of defining the borders of infrastructural belt are regulated by National Program of Railway Infrastructure.

Article 11

- (1) Borders of infrastructural belt must be within the borders of railway land or identical to them.
- (2) Borders of the railway belt must be within the borders of infrastructural belt, or identical to it.
- (3) Borders of a protective railway belt are, as a rule, outside, but can be also within the borders of the infrastructural belt.
- (4) Borders of the fire protection belt along the railway lines, and of noise and vibration protection can be within and/or outside the borders of the infrastructural belt.

Article 12

The infrastructural belt can contain also the parts of the railway transport system and other systems which are not a part of the railway system, as those of telecommunication, electric power, road, (the parts of denivellations and railway-road crossings at a same level etc.) water and navigation, port, border-customs office etc., and the buildings, parts of buildings, rooms, spaces, areas and equipment not to be considered to be the railway infrastructure, as well as the installations of a general interest, but all in conformity with the regulation and with the approval of the railway infrastructure manager.

Article 13

Within the borders of the infrastructural belt, with the approval of the Infrastructure Manager, there can be permanently or temporarily located buildings, the parts of buildings, rooms and spaces, plants, structures, devices and installations which are not in the function of the use and maintenance of the railway infrastructure, unless in opposition to the regulations regulating safety, non-disturbance and orderliness of railway traffic, and the maintenance of infrastructure, or especial regulations from other areas applied to them, and unless in opposition with the developmental plans of railway infrastructure with respect to their concept and rate of realization.

Infrastructure sub-systems

Article 14

Railway infrastructure sub-systems are:

- construction infrastructural sub-system

- electric power infrastructure sub-system
- traffic control and signalling-safety infrastructure sub-system
- other functional parts and equipment of railway infrastructure.

Article 15

- (1) Railway infrastructural sub-systems are made of the groups of facilities, structures, plants, devices, assemblies and elements and their parts and equipment, which, as technically-technologic wholes, individually serve for a safe, orderly and undisturbed flow of railway traffic, and for the other aspects of the use of the railway infrastructure.
- (2) Infrastructure sub-systems or their parts with belonging land make a railway line and the capacities necessary for its use and maintenance.

Construction infrastructure sub-system

Article 16

- (1) Construction infrastructure sub-system is made of:
 - lower railway structure (railway facilities)
 - top railway structure.
- (2) Lower railway structure (railway facilities) are the buildings, structures and equipment.
- (3) Facilities of the lower railway structure are:
 - a) geotechnical structures:
 - railway body (embankments, cuts, step excavations)
 - tunnels and galleries
 - b) structural facilities:
 - bridges, culverts, viaducts, underpasses, pedestrian underpasses
 - railway platform roofs and access buildings
 - c) railway-road and pedestrian crossings at the same level
- (4) Facilities of the lower railway structures are:
 - a) geotechnical and hydro-technical structures:
 - supporting, anchoring and lining structures
 - protective structures (windbreaks, snowbreaks, noise-protection, protection nets, protection vegetable belts)
 - drainage structures (surface and underground)
 - shore-fortifications and watercourse structures
 - loading-unloading ramps
 - platforms, railway stations and other developed areas
 - manoeuvring paths, access roads, fire escape roads etc.

- b) construction structures:
- turntables, travelling platforms, weigh bridges, etc.
- (5) Lower railway structure equipment is consisted of the railway equipment, as follows:
- fences
- signalling marks, markings etc.
- (6) Top railway structure are the structures of the top railway construction, assemblies of the top railway structure and the elements of the top railway structure.
- (7) Top railway structure facilities are :
- tracks with ballast (uninterruptedly welded and with classic composition)
- tracks on a firm basis
- switches and intersections
- dilatation truck structures
- (8) Assemblies of top railway structure are the functional parts of the structures of the railway top structure consisted of individual elements of the railway top structure
- (9) Elements of railway top structure are:
- track rails, guide rails, protective rails, switch rails,
- welded rail joints, classic rail connections, insulating assemblies (glued and classic)
- sleepers and concrete load bearing elements
- truck and switch fixture and connection accessories
- devices for the increase of transversal resistance of a truck and devices against rails sliding
- rail lubrication devices
- elements for paving of railway-road crossings
- elements for noise and vibration absorption
- ballast
- subbase and the layers and materials for the base stabilization
- signalling and railway marking
- other elements of the railway top structure.

Electro-power infrastructural sub-system

Article 17

- (1) Electric power infrastructure sub-system is made of:
- fixed plants for supplying electric traction
- other electro-power plants.
- (2) The plants from item (1) of this article consist of devices (apparatuses) , assemblies, equipment and structures.
- (3) Fixed plants for electric traction supply are:

- contact network
- electro-traction sub-stations and supply HV power lines
- sectioning plants
- remote control plants

(4) Devices (apparatuses) of the stable plants for electric traction supply are:

- transformers (power and measuring)
- transducers
- assembly tools (switches, separators)
- control switches
- lightning arrestors
- rectifiers (power, of auxiliary voltages)
- chokes
- electro filter (block, choke)
- relays (of protection, control-protective)
- control/protective boards and cabinets
- devices of remote control in electro-power facilities and centres of remote control
- remote controls of the traction system protection 3 kV
- data exchange devices
- devices for reliable continuous supply of consumers
- devices of spot control of separators of KM etc.

(5) Assemblies of stable plants for electric traction supply are:

- synoptic mosaic board with distributors
- electronic units of the remote control device
- relay units of the remote control device
- remote control units
- computers with software support
- protocol converters
- time indication units
- static converters
- SCADA (informatics programs) etc.

(6) Equipment of stable plants for electric traction supply is:

- equipment of suspension, tightening, supply and sectioning of contact network
- equipment for overhead contact line, return conduit and grounding
- equipment for protection, signalization and marking of contact network
- groundings (operative, protective and lightning)
- electro-installations within a plant
- HV busbars and fuses
- insulators (conducting, supporting, tightening)
- accumulators
- capacitor's batteries
- HV power line conductors
- cables (installation, power, HV and optical)
- connecting equipment
- electronic cards and modules
- TK modems

- WT elements
- fire alarm switchboards and equipment
- lightning arrester
- basic watches
- GPS time systems etc.

(7) Structures of stable plants for electric traction supply are:

- supporting structures and contact network fixtures
- support structures of HV devices
- oil pits
- HV power line poles etc.
- foundations of supporting structures and power transformers

(8) Other electro-power plants are:

- transformer stations (of general purpose, for preheating and air conditioning of wagons and for switches heating)
- other electro-power plants (external lighting etc.)

(9) Devices (apparatuses) of other electro-power plants are:

- transformers (power and measuring)
- disconnecting devices (switches, separators)
- lightning arrestors
- devices for the compensation of futile energy
- rectifiers
- measuring devices and control devices
- relays of protection
- control/protective boards and cabinets
- train preheating devices
- luxomates
- aggregates, booster pumps, etc.

(10) Equipment of other electro-power plants is:

- HV busbars and fuses
- accumulators
- insulators (conducting, supporting, tightening)
- groundings (operative, protective, lightning arrester's)
- cables (installation, power, high-voltage)
- connecting equipment
- electro-installations within a plant
- overhead networks MV and LV)
- external lighting points
- electro motors
- heating and cooling equipment
- distributor-control boards, cabinets, etc.

(11) Structures of other electro-power plants are:

- transformer station poles
- lighting poles

Traffic-control and signal-safety infrastructure sub-system

Article 18

- (1) Traffic-control and signal-safety infrastructure sub-system is made of:
 - signalling-safety devices
 - telecommunication device.
- (2) Signal-safety and telecommunication devices consist of devices, assemblies and elements
- (3) Signalling-safety devices are:
 - devices for securing official places (railway station devices)
 - devices for securing traffic in inter-station area (railway devices)
 - devices for securing railway-road and pedestrian crossings
 - devices for central traffic control (remote control devices)
 - devices for the control of manoeuvring operations
 - devices for data transfer and action on a train (AS and ETCS)
 - devices for marshalling yards automation
 - devices for supplementary protection
- (4) Signalling-safety assemblies are:
 - controlling, central logical and supply parts of devices
 - assemblies for securing switches
 - assemblies for free tracks control
 - central and remote units of the devices for central traffic control
 - track brakes
 - assemblies for switch heating
 - other assemblies of signalling-safety devices.
- (5) Elements of signalling-safety devices are:
 - signals
 - barriers and semi-barriers
 - devices for installing switches
 - deviating locks
 - devices for installing barriers and semi-barriers
 - AS *balize*
 - track contacts
 - switch heating
 - computer elements
 - other external and internal elements.
- (6) Telecommunication devices are:
 - portable systems and media
 - Railway AT network
 - railway telephony
 - radio devices (RDU, GSM-R, UHF and VHF)
 - sounding systems and interphones

- passenger visual informing systems
- business information system
- systems for video monitoring
- fire protection systems
- land-sliding alarm systems
- systems for the follow up of wind force.

(7) Telecommunication assemblies are:

- analogue circuits
- digital circuits
- railway automatic telephony
- railway station and line parts of devices
- register-phones
- travellers' and official PA system
- other telecommunication assemblies.

(8) Telecommunication elements are:

- TK lines (overhead lines)
- copper and optical cables
- information boards and watches
- cameras for video control
- informatics elements
- other elements.

Other functional parts and equipment of the railway infrastructure

Article 19

(1) Other functional parts and equipment of railway infrastructure are:

- a) buildings, parts of buildings, rooms, spaces, areas, communications and fences, which serve for the use, accommodation of the plants, control, maintenance, control of status and protection of railway infrastructure (railway infrastructural sub-systems) and which are used with the regulation and organization of the railway transport.
- b) equipment, vehicles and machines to be used for the maintenance and control of the condition of the railway infrastructure (railway infrastructural sub-systems),
- c) other computer elements in the function of the railway infrastructure (railway infrastructural sub-systems)
- d) inventory in the function of railway infrastructure (railway infrastructural sub-systems).

Concluding provisions

Article 20

With the date of the start of the this Rule Book application, the Rule Book on Railway Fixed Plants (Narodne Novine no. 5/95) stops being effective.

Article 21

This Rule Book becomes effective on the eighth day from the date of publishing in "Narodne Novine", and will be applied from the date of the start of the application of the Railway Law ("Narodne Novine", no. 123/03 and 30/04).

**MINISTER of
SEA, TOURISM, TRANSPORT AND
DEVELOPMENT**

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CLASS: 011-01/05-02/99
FILE NO.: 530-08-05-1
Zagreb, 13 October 2005