

# DRÁŽNÍ ÚŘAD (RAIL AUTHORITY)

Wilsonova 300/8 121 06 Praha 2 - Vinohrady Czech Republic

Ref: DUCR-50099/12/Si

# **ANNUAL SAFETY REPORT**

on activities of the Rail Authority for the year of 2011

Ing. Pavel Kodym Director of the Rail Authority

Prague, 19 September 2012

## **Table of contents:**

A.1. SCOPE OF THE REPORT:	3
A.2. Summary:	3
B. INTRODUCTORY SECTION	3
1. Introduction to the report	3
2. RAILWAY STRUCTURE INFORMATION	4
LIST OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS	
3. SUMMARY – GENERAL TREND ANALYSIS	7
C. ORGANISATION	7
1. Introduction to the organisation	7
2. RELATIONSHIP OF THE RAIL AUTHORITY WITH OTHER NATIONAL BODIES	9
D. THE DEVELOPMENT OF RAILWAY SAFETY	9
1. INITIATIVES TO MAINTAIN/IMPROVE SAFETY PERFORMANCE	9
2. Detailed data trend analysis	
3. RESULTS OF SAFETY RECOMMENDATIONS AND RELEVANT MEASURES THAT WERE REALIZED OR ADO	
A RESULT OF INDIVIDUAL ACCIDENTS:	15
E. IMPORTANT CHANGES IN LEGISLATION AND REGULATION ON RAILWAY SAFETY	
2011	17
F. THE DEVELOPMENT OF SAFETY CERTIFICATION AND AUTHORISATION	18
1. NATIONAL LEGISLATION – INPUT DATA – AVAILABILITY	18
2. Numerical data	18
3. PROCEDURAL ASPECTS	18
G. SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS	20
1. SUPERVISION OF RAILWAY UNDERTAKINGS AND INFRASTRUCTURE MANAGERS	20
H. REPORTING ON THE APPLICATION ON THE CSM ON RISK EVALUATION AND	
ASSESSMENT	24
I. NSA CONCLUSIONS ON THE REPORTING YEAR - PRIORITIES	25
J. SOURCES OF INFORMATION	26
K ANNEYES	27

#### A.1. Scope of the report:

This Annual Report is prepared in accordance with Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 and summarizes activities of the safety authority in relation to operation of tracks of national and regional rail systems and operation of rail transport on these tracks in the Czech Republic in 2011. The scope of the report is further based on guidelines for Template for Structure for the Content of the NSA Annual Safety Report and Guideline for the use of the template.

Ref: DUCR-50099/12/Si

### A.2. Summary:

The Annual Report on activities of the Rail Authority generally evaluates the results of provision of railway operation safety and of railway operations in the Czech Republic for year of 2011. It provides a review and information on the railway structure, and at the same time, it shows conditions of gradual performance and implementation of Safety Directive to the national legal regulations. It analyzes development of railway safety in 2011, and results and experiences concerning supervision of infrastructure managers and railway undertakings. Also, the report summarizes procedure of issuing safety certificates for railway undertakings and infrastructure managers where new safety certificates were issued in accordance with the Regulation (EC) No 653/2007, Directive 2004/49/EC and Regulation No 376/2006 Coll., on the management system for the rail operation safety and rail transport safety, and on procedures in the event of the rise of accidents and incidents in rail systems.

The Report is supplemented with Annexes, which contain a map of the railway network in the Czech Republic, information on infrastructure managers and railway undertakings, who participate in the operation of the rail transport. The registration review on incidents forms another Annex and charts demonstrating trend of accidents and other data between 2007 and 2011.

# **B.** Introductory section

## 1. Introduction to the report

The Rail Authority prepared the Annual report on its activities, which contains the following information:

- a) development of railway safety, including CSI summary at the level of the Czech Republic,
- b) important changes in legislation and regulations concerning railway safety,
- c) development of granting the safety certification and authorisation and subsequent audits,
- d) results and experiences concerning supervision of infrastructure managers and railway undertakings.

The Report is based on provisions of Article 18 of Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 that was integrated to Czech legislation by transposing into paragraph 49e of the Act No. 266/1994 Coll., on rail systems, as amended (hereinafter referred to as "Act on rail systems", and further specified by paragraph 6 of Regulation No. 376/2006 Coll., on the management system for the rail operation safety and rail transport safety, and on procedures in the event of the rise of accidents and incidents in rail systems.

Ref: DUCR-50099/12/Si

The Report is designed for infrastructure managers, railway undertakings, other national safety authorities, EU authorities, and all present and future undertakers in the area of railway transport.

The purpose of this Report is to provide railway undertakings, infrastructure managers and other concerned parties information about the development of railway safety. At the same time, the Report can help understand the newly issued legislation.

Data stated in this Report are based on information submitted by railway undertakings and infrastructure managers via their Annual Reports. In 2011, all infrastructure managers operating nation-wide and regional rail systems submitted the Annual Safety Report by the date stated as per Article 9(4) of Safety Directive. Out of a total number of railway undertakings (see Annex A.2.2), all undertakings submitted the annual safety report by the date stated as per Article 9(4) of Safety Directive, except for 9 undertakings that did not submit the report although they had concluded the contract on access to rail systems and actively operated rail transport on these rail systems. These undertakings will be probably sanctioned after all aspects are considered.

This Report has been published on the web site of the national safety authority (Drážní úřad) at www.ducr.cz.

## 2. Railway Structure Information

Railway network in the Czech Republic is formed of nation-wide and regional rail systems, mostly State owned, and in administration of the Railway Infrastructure Administration, state organization (SŽDC).

Classification of railway network of the Czech Republic that consists of nation-wide and regional rail systems, sorted by ownership, length of operated rail systems and infrastructure managers and railway undertakings, effective on 31 December 2011:

Rail system owner	Infrastructure manager	Track		Railway undertaking (operator)
Czech Republic SŽDC, s.o.		Nation-wide and regional rail systems of the Czech Republic	9470 km	Operators who concluded the contract with the Railway Infrastructure Administration
	ČD, a.s.	Nation-wide and regional rail systems of the Czech Republic	1 km	Operators who concluded the contract with the ČD, a.s.

Rail system owner	Infrastructure manager		Track length	Railway undertaking (operator)
	VIAMONT a.s.	Regional rail systems Trutnov – Svoboda nad Úpou a Sokolov – Kraslice	37 km	GW Train Regio a.s. (new name of the company VIAMONT Regio a.s.) And operators who concluded the contract with the VIAMONT a.s.
	Advanced World Transport a.s.			GW Train Regio a.s. (new name of the company VIAMONT Regio a.s.); Advanced World Transport a.s. And operators who concluded the contract with the Advanced World Transport a.s.
Jindřichohradecké místní dráhy, a.s.	Jindřichohradecké místní dráhy, a.s.	Regional rail systems  – Jindřichův Hradec – Nová Bystřice and Jindřichův Hradec - Obrataň	79 km	Jindřichohradecké místní dráhy, a.s.
Svazek obcí údolí Desné	SART - stavby a rekonstrukce, a. s.	Regional rail systems - Šumperk – Sobotín and Petrov n.D – Kouty n.D.	22 km	Veolia Transport Morava a.s., ČD Cargo, a.s. SART - stavby a rekonstrukce, a. s.
KŽC, s.r.o.	KŽC Doprava, s.r.o.	Regional rail system Česká Kamenice – Kamenický Šenov	5 km	KŽC Doprava, s.r.o.

## Basic characteristics of railway network of SŽDC (on 31/12/2011):

Total length of rail tracks	9 470	km
Length of electrified tracks	3 078	km
Length of standard-gauge track	9 447	km
Length of narrow-gauge line	23	km
Length of single tracks	7 557	km
Length of double and multiple tracks	1 913	km
Total construction length of tracks	15 552	km
Number of bridges	6 735	pcs
Number of tunnels	158	pcs
Total length of bridges	150 945	m
Total length of tunnels	42 743	m
Number of level crossings	8 095	pcs
Number of points	24 544	pcs

Tracks of national rail systems incorporated into the European railway system – corridor tracks

Indicator	km
Total length of rail tracks	1 330
Total construction length of tracks	3 725

Tracks of national rail systems incorporated into the European railway system – other

Ref: DUCR-50099/12/Si

Indicator	km
Total length of rail tracks	1 270
Total construction length of tracks	2 885

Tracks of national rail systems - other

Indicator	km
Total length of rail tracks	3 321
Total construction length of tracks	4 832

Regional tracks

Indicator	km
Total length of rail tracks	3 541
Total construction length of tracks	3 976

No high-speed lines are constructed in the territory of the Czech Republic.

A map of the network is shown in Annex A.1.1 with marked Trans-European Railway Network in the Czech Republic and in Annex A.1.2 with marked lines according to the number of tracks, electric traction, etc.

Rail transport in the Czech Republic is operated for the purpose of public transport of persons and goods, non-public transport of persons and goods. A special rail transport is then operated with the view of transport of special vehicles for maintenance work on infrastructure, measuring infrastructure, rides of so-called historical and nostalgic trains, and for tests of vehicles under operational conditions. The Czech Railways, j.s.c. and ČD Cargo, a.s. are the decisive railway undertakings (operators) operating the passenger and freight transport respectively on the railway network of the Czech Republic in 2011.

## List of Railway Undertakings and Infrastructure Managers

The list of individual infrastructure managers is given in Annex A.2.1.

Just to explain Table in Annex A.2.1 it should be noted that part of tracks of nation-wide and regional rail systems that are used for maintenance of rail vehicles and loading and unloading remained after 30 June 2008 in the ownership of Czech Railways, j.s.c. that is also manager of this infrastructure (see Annex A.2.1).

Other tracks used for maintenance of rail vehicles are owned by ČD Cargo a.s. These tracks were reclassified as railway sidings and do not therefore come under Directive 2004/49/EC.

The list of individual railway undertakings (operators) is given in Annex A.2.2.

The list of railway undertakings (operators) include contractual operators, i.e. operators who concluded the contract on access to nation-wide or regional rail systems with the Railway Infrastructure Administration, state organization, and

whose performance is liable to charges for the use of railway infrastructure. In 2011, there were 75 contractual operators, see detailed list in Annex A.2.2. This list also includes 1 operator that, in addition to transport services on the connection of rail systems, operates transport on his own rail system (JHMD), and two operators that operates rail transport on a rail system which is not operated by SŽDC (Railway Infrastructure Administration, state organization). Five of the railway undertakings are foreign companies that obtained safety certificate part B for the Czech Republic and realized more or less important performances in 2011.

Ref: DUCR-50099/12/Si

#### 3. Summary - General Trend Analysis

General trend of safety can be evaluated in the long-term (only 6 years), because the Rail Authority has data only from year 2006, i.e. from the moment when the Rail Authority was obliged to elaborate the first Annual Safety Report. Data are reported as per definitions of Regulation (EC) No. 91/2003 and an amending Regulation (EC) No. 1192/2003 in accordance with CSI. The Table below demonstrates the most important indicators for the period under consideration. Data from 2011 are further described in Annex C.1

	2006	2007	2008	2009	2010	2011
Number of accidents:	282	123	133	113	125	99
Number of fatalities:	52	25	44	26	48	29
Total number of serious injuries:	89	102	139	92	107	74
Number of precursors:	91	47	30	55	86	115

Tendency of accident rate during the monitored period is demonstrated in table analyzing general trend. In 2011, number of accidents and fatalities / serious injuries decreased.

The data are obtained mainly from annual reports effective on 30/06/2012 submitted by infrastructure managers.

# C. Organisation

## 1. Introduction to the organisation

The Rail Authority is a rail administrative authority established by the Act No. 266/1994 Coll. on rail systems, as amended, (hereinafter referred to as the "Act on rail systems"), as the State Administration Body with a seat on Wilsonova 300/8, 121 06 Praha 2; it is subordinated to the Ministry of Transport.

Organizational chart of the Rail Authority is given in Annex B.1 and it has not changed since 2006 when annual reports started to be published. Organizational chart must be agreed on with the Ministry of Transport.

Ref: DUCR-50099/12/Si

The Rail Authority performs the following functions:

- regulatory authority within the meaning of the Act on rail systems,
- national safety authority within the meaning of Directive 2004/49/EC,
- authority for RID (carriage of dangerous goods),
- it fulfils other tasks of national legislation,
- the special Building authority within the meaning of the Act on rail systems,
- supervision of products within the meaning of the Act No. 22/1997 Coll.,
- approval of professional competence of persons authorized to drive rail vehicles, persons performing revisions, inspections and tests of the facilities,
- hearing of administrative infractions and administrative torts within the meaning of the Act on rail systems,
- state supervision according to the Act on rail systems,
- approval of vehicles and structures on railway sidings, municipal tracks, approval of trolleybus systems and cableway installations, and drag lifts,
- supervision of observance of passengers' rights,
- maintenance of the Register of Infrastructure (RINF)
- certification of Entities in Charge of Maintenance (ECM)
- maintenance of the National register of rolling stock
- maintenance of the National register of licenses for train drivers.

The Rail Authority employed a total of 111 persons in 2011. Exact number of employees of the national safety authority performing tasks as per Directive 2004/49/EC cannot be specified, as the majority of them perform also other activities as required by national legislation. Estimated number of persons who function as the national safety authority is approximately 50 employees.

The main task of the Rail Authority's Construction Section is to issue permits for putting into service of constructions of the track and structures on a track and issue permits for constructions to be built in the protective zone of the track.

Technical Section issues permits for specified technical devices, i.e. gas, pressure, transportation and electrical equipment of rail systems and rail vehicles. At the same time, it approves putting safety devices into operation. Department of Carriage of Dangerous Goods supervises transport of consignments as per RID, approves freight wagons designed for carriage of dangerous goods and their components. Competency Testing Department verifies professional competencies of inspectors and revision technicians in terms of revisions, inspections and tests of specified

technical equipment. This section also provides for tests of train drivers and issues certificates of competency for them.

Ref: DUCR-50099/12/Si

Licensing Department issues licenses and safety certifications/authorisations to infrastructure managers and railway undertakings.

Methodical Department prepares a legal basis of the Rail Authority and generates internal rules.

#### 2. Relationship of the Rail Authority with other National Bodies

Relationship of the Rail Authority with other National Bodies and other subjects is given in Annex B.2 and it is the same as in 2010.

# D. The development of railway safety

#### 1. Initiatives to maintain/improve safety performance

The most important safety recommendations issued in 2011 are stated in Table D.1.1. These recommendations were issued by the National Investigation Body as part of Reports on the results of investigation of causes and circumstances of incidents in accordance with provisions of the Act on rail systems in order to minimize risks of accidents.

Unlike Directive 2004/49/EC, safety recommendations of the National Investigation Body are issued for railway owner, infrastructure manager or railway undertaking directly in connection with the results of investigation of an incident. The Rail Authority only communicates after a request these recommendations to other railway owners, infrastructure managers or railway undertakings.

Based on actual incidents, railway undertakings and infrastructure managers take their own measures that do not have to be identical to those suggested by the National Investigation Body.

Table D.1.1 - Safety measures triggered by accidents/precursors to these

Accidents/precursors which trigged the measure			Safaty managers decided	
Date	Place	Description of the event	Safety measure decided	
7/12/2010	Lipová Lázně	Broken wheel of a carriage and consequent derailment of rear boogie of this one carriage of the fast train No. 900	National Investigation Body issued the following recommendations: ČD, a. s., railway undertaking and operator of the infrastructure manager, 1. It is recommended for the carriages with chock brakes to use such wheels which will be resistant to heat stress  The Rail Authority: 1. It is recommended to take own measure forcing implementation of the above recommendation	
20/12/2010	Kamenné Žehrovice	Collision of passenger train (which approached to the Kamenne Zehrovice station) No. 19702 with a stationary shunting movement	I. It is recommended to modify design of the vehicle's interior of class 814 and class 914 vehicles in order to improve the safety of train driver and passengers in case of accidents of the similar type     It is recommended to modify design of glass partition between low-floor area and rear passenger compartment in order to prevent destruction of the glass caused by impact of	

Accidents/precursors which trigged the measure			
Date	Place	Description of the event	Safety measure decided
			The Rail Authority  1. It is recommended to consider whether design of class 814, 914, 014 vehicles is in line with safety requirements of national legislation (Art. 43 paragraph 1 Act No. 266/1994 Coll.), especially as far as passenger's and staff's safety is concerned 2. It is recommended to consider taking measures according to Art. 44 paragraph 2 Act No. 266/1994 Coll. with regard to current condition of the above mentioned vehicles
6/1/2011	Vojtěchov	Regional passenger train No. 5301 went on the track which was in poor weather conditions	National Investigation Body issued the following recommendations: SŽDC, s. o., infrastructure manager of nation-wide and regional category,  1. It is recommended to establish procedures in order to restore traffic after the accident or incident for the operation by provable documented affirmative expression of professionally qualified staff  2. It is recommended to establish procedures in order to allow driving a train which stands on track, but a dispatcher is not sure whether the track is clear  3. It is recommended to establish a clear methodology when it is useful to ask for winter conditions measures  4. It is recommended to use on-line weather information and local weather information provided by Czech Hydrometeorological Institute's branches, especially in areas where obstacles within clearance gauge are often expected due to poor weather conditions  The Rail Authority  It is recommended to take their own measures to ensure adoption of the above recommendations by all infrastructure managers of main and regional lines within Czech Republic
22/1/2011	Brno- Malomě- řice	Derailment of locomotive and 3 wagons of freight train No.52336 while running at the station Brno-Malomerice on broken point of switch No. 43	National Investigation Body issued the following recommendations: SŽDC, s. o., infrastructure manager of nation-wide and regional category, 1. It is recommended, on all points which are in operation for more than 15 years, to make defectoscopy inspections more often and to ensure that the inspection is capable to detect also hidden defects 2. It is recommended to determine the maximum lifetime of points depending on their operational load and time 3. It is recommended to improve IM's internal regulation defining IM's internal supervisory system, in order to remove ambiguities concerning follow-up inspections and responsibilities  The Rail Authority It is recommended to take own measure forcing implementation of the above first two recommendations by all IMs in Czech Republic
2/2/2011	Vodňany	Regional passenger train No. 18003 departed from the station Vodňany without permission to departure and collided with the freight train No. 88850 at open line near the station Vodňany. Regional passenger train derailed.	National Investigation Body issued the following recommendations: ČD, a. s., railway undertaking and operator of the infrastructure manager, SŽDC, s. o., infrastructure manager of nation-wide and regional category 1. It is recommended to establish a technical (interlocking) device, which excludes human error, especially unauthorized departures of trains from the stations 2. It is recommended to modify the technological procedures to ensure a control mechanism eliminating human error. Mainly to remove routine act of employees  ČD, a. s., railway undertaking and operator of the infrastructure manager 1. It is recommended to modify design of the vehicle's interior of class 814 and class 914 vehicles in order to improve the safety of train driver and passengers in case of accidents of the similar type 2. It is recommended to modify access to driver's cab and the first row of seats in order to ensure that: handbrake handle with its stand moved backward by buffers deformed due to frontal crash don't obstruct the driver's escape form the cab; driver's escape is not obstructed by passengers or their luggage present within cab door clearance and opening of the cab door doesn't obstruct escape of passenger occupying the first left seat at the same time; passengers occupying the first row of seats on right hand side are not in danger of crashing to partition of driver's cab, especially to its glassed-in part. 3. It is recommended to modify design of glass partition between low-floor area and rear passenger compartment in order to prevent destruction of the glass caused by impact of

Accidents/precursors which trigged the measure			Cofety management decided	
Date	Place	Description of the event	Safety measure decided	
14/3/2011	Uhersko	Broken wheel of locomotive of the passenger train No. 867 when approached to the station Uhersko	It is recommended to include defectoscopy testing of tyre of wheels into the operating rules in that case in which arises a heat-affected of tyre of wheels     According to causes of this accident it is recommended to tighten the tolerance for	
31/3/2011	Čimelice	A passenger's arm was locked into the door when she was leaving the passenger train No. 7905. The passenger was towed approximately 15 m.	National Investigation Body issued the following recommendations:  ČD, a. s., railway undertaking and operator of the infrastructure manager,  1. It is recommended to establish the limit of the allowance between the frame and the door of railcars class 842 to minimize the possibility of false door-closed indication when a passenger's hand is locked between the doors  2. It is recommended to include regular check of the above mentioned allowance into railcar class 842 maintenance procedures  3. It is recommended to improve door-closed detection system to indicate door-closed status only when doors are tightly closed along the full length of their edge  4. It is recommended to modify door control system of railcar class 842 to disable initiation of pneumatic door-closing by door handle when driver's door-control switch is in "open left" or "open right" positions. This should prevent unwanted door-closing when a door handle is accidentally operated by boarding passenger  5. It is recommended to improve traction control system of railcar class 842 in order to disable traction until door-closed indication is received  6. It is recommended for all depots to improve train-driver's departure procedure by mandatory visual check of all doors within train-driver's viewing field (not using mirrors) ensuring that embankment/ dismemberment is complete and doors are properly closed after door-closed indication was received. This check should be applied for all rolling stock without door-closed detection system reliably indicating whether doors are tightly closed along the full length of their edge  The Rail Authority:  1. It is recommended to take own measure forcing implementation of the above recommendation by all railway undertakings running railcars class 842	
5/6/2011	Vyškov na Moravě	Derailment of freight train No. 52061 between Vyškov na Moravě and Ivanovice na Hané stations (Nezamyslice — Brno hlavní nádraží main line)	National Investigation Body issued the following recommendations: SŽDC, s. o., infrastructure manager of nation-wide and regional category  1. It is recommended to determine the maximum lifetime of rubber pad inserted under the flange of a rail because of their verifiable degradation due to the traffic.  2. It is recommended to define maximum wear and tear of rubber pad inserted under the flange of a rail and maximum acceptable amount of fully worn out pads per certain distance of a track; if this amount is exceeded than all rubber pads must be replaced or other safety measures taken.  3. It is recommended to determine the maximum lifetime or wear and tear of double spiral rings if their location is in rail fastening system.  4. It is recommended to check technical condition of rubber pads inserted under the flange of a rail of all long welded rails older than 10 years before hot weather in 2012 comes.  5. It is recommended to check technical condition and flexibility of double spiral rings of all long welded rails older than 10 years before hot weather in 2012 comes.  6. It is recommended to make a special knowledge test for all managers who are involved in control and maintenance activities and remove defects of long welded rails before hot weather in 2012 comes.  7. It is recommended to make an analysis of all possible work tasks and activities which are need for track maintenance and checks, to determine the average time demands and these results of the analysis compare with actual personnel capacities involved. Based on these results to take other appropriate measures.  The Rail Authority:  1. It is recommended to take their own measures to ensure adoption of the recommendations 1 – 5 by all infrastructure managers of main and regional lines within Czech Republic.	

	ents/precu	ursors which measure	
Date	Place	Description of the event	Safety measure decided
11/7/2011	Olomouc	Collision of freight train No. 67261 with an obstacle in the switch No. 89. This switch was out of service due to its repair.	National Investigation Body issued the following recommendations: SŽDC, s. o., infrastructure manager of nation-wide and regional category 1. It is recommended to define a procedure for preventing unwanted setting of train route via switch or track which is closed to traffic and where temporary signal "Stop, track closed" can't be used. This procedure should ensure that interlocking system can't set any route via such switch or track.  The Rail Authority 1. It is recommended to take their own measures to ensure adoption of the above recommendation by all railway infrastructure managers within Czech Republic.
29/7/2011	Okříšky - Jihlava	Repeated derailments and spontaneous derailing idle steam locomotive sorted on the train No. 62870	National Investigation Body issued the following recommendations: ČD, a. s., railway undertaking and operator of the infrastructure manager, 1. Unify data in the prescription "ČD D2/1 Doplněk s technickými údaji k Dopravním předpisům, z přílohy Tabulka 1h Hnací vozidla historická", the basic technical data on rolling stock listed on the license.  The Rail Authority 1. It is recommended to take own measure forcing implementation of the above recommendation (see action director "opatření ředitele O12 č. j. 695/2011-O12") by all railway undertakings.
17/10/2011	Ostrava- Třebovice - Děhylov	Collision of broken part of cardan shafts of driving rail vehicle beyond the contour of the vehicle with section of construction of the track	National Investigation Body issued the following recommendations:  ČD, a. s., railway undertaking and operator of the infrastructure manager,  1. Strengthen of rolling stock used in cardan shaft unbalance in a way that heat does not affect the quality and plasticity of the shaft material.  2. To use safety stirrups or cage for security of coupling and cardan shafts used in rolling stock against accidental damage around the shaft so that no loose, uncontrolled spinning of the shaft does not exceed the outline of the vehicle, endanger the safety of persons and the safe function of buildings and track equipment and endanger the environment.  3. In to the time to ensure the above coupling and cardan shaft by safety stirrups or
22/10/2011	odbočka Odra	Regional passenger train passed a signal at danger (entrance signal showing red aspect) followed by collision with buffer and derailment of all rolling stock.	recommendations by all railway undertakings using the operation of railway transport in possibly a rolling stock and for their approval.  National Investigation Body issued the following recommendations: SŽDC, s. o., infrastructure manager of nation-wide and regional category  1. It is recommended to hurry on introduction of ETCS to main and regional lines.  Infrastructure managers  1. The lines where the long term will not be introduced into operation ETCS to install the technical equipment for emergency stopping of trains, whose security is threatened, which will be activated automatically unlawful driving of a rolling stock as the main signal.  Railway undertakings  1. It is recommended to hurry on installation of mobile components of ETCS into railway vehicles in order to allow use of full functionality of ETCS as soon as the infrastructure is ready.  The Rail Authority  1. It is recommended to take own measure forcing implementation of the above recommendations.
5/12/2011	Baška	Regional passenger train No. 3127 passed a signal at danger and stopped at the switch in Baska station in sufficient distance to avoid possibility of a collision with another approaching train.	National Investigation Body issued the following recommendations: SŽDC, s. o., infrastructure manager of nation-wide and regional category 1. It is recommended to hurry on introduction of ETCS to both main and regional lines, in accordance with the wording of previous documents "Vydání bezpečnostního doporučení" (The issue of safety recommendations), No. 6-538/2009/DI-1 on 18th March 2010, No. 739/2010/DI on 15th December 2010 and No. 355/2012/DI on 01st June 2012; 2. On the lines where the ETCS is not going to be introduced into operation to install the technical equipment for emergency stopping of trains. This equipment will be

	ents/precuigged the	ursors which measure	Safety measure decided							
Date	Place	Description of the event	Salety measure decided							
			not to allow departure of the train with the passengers (regular or extraordinary) from an area for entrance and exit of passengers only by using of signal.							
			ČD, a. s., railway undertaking and operator of the infrastructure manager, 1. It is recommended to hurry on installation of mobile components of ETCS into railway vehicles in order to allow use of full functionality of ETCS as soon as the infrastructure is ready; 2. to modify technological procedures in order to the train driver of the leading rolling stock of the train with passengers in an area for entrance and exit of passengers at the station where the departure of the rolling stock is allowed only by using of signal always initiated before putting of the train in motion, warning signal which will be given verbally, by signalling tool or by technical equipment.							
			The Rail Authority  1. It is recommended to take own measure forcing implementation of the above recommendations for other infrastructure manager (IM) and railway undertaking (RU) in the Czech Republic.							

In order to maintain and improve railway safety expressed efforts focus on modernization and development of railway infrastructure, particularly in the following areas:

- modernize transit railway corridors and their crucial railway junctions, and fit these corridors with new safety devices,
- prepare and realize projects to fit tracks with "Global System for Mobile Communication for Railway" (GSM-R) and "European Train Control System" (ETCS) and ensure interoperability of tracks incorporated into the European railway system,
- reconstruct and modernize communication and safety devices, reduce the number of stations with electromechanical safety devices, fit stations with electronic safety devices, and use remote control of safety devices and remote control of the track,
- enhance safety of railway crossings level crossings should be removed and other crossings should be fitted with safety devices,
- build new stops, shelters and wheelchair accessible platforms.

In 2011, modernization of transit railway corridors and their important railway junctions continued in order to ensure technical parameters identical with corridor lines.

In order to ensure continuous improvement of railway safety, an increased attention has been paid to railway level crossings that are still critical places of collisions of road and railway vehicles. A total of 132 state supervisions of level-crossings were performed; for more details see Part G of this Report.

#### 2. Detailed data trend analysis

In accordance with Directive 2004/49/EC and Regulation (EC) No 91/2003 of the European Parliament and of the Council the following events were recorded in 2011:

Ref: DUCR-50099/12/Si

- Number of accidents: 99,

- Number of fatalities: 29,

- Total number of serious injuries: 74,

- Number of precursors: 115.

Development of railway safety for year of 2011 is further given in Annex C.

In 2011, 99 accidents as defined by Regulation (EC) No 91/2003 of the European Parliament and of the Council happened on nation-wide and regional rail systems, which is a slight decrease (21%) of number of accidents as compared with 2010.

29 persons died (not counting suicides) and 74 persons were seriously injured – number of fatalities and serious injuries decreased as compared with 2010.

Total costs of material damage of vehicles / infrastructure amounted to approximately EUR 5 091 895.

Total costs of environmental damage amounted to approximately EUR 356 123.

In conclusion, it can be said that although the costs of associated damage were higher in 2011 as compared with previous years, the level of safety of rail systems and rail transport operation is still very high.

Again, the most serious issue is represented by the number of accidents on railway level crossings, where people do not respect signalling devices (however, the number of these accidents significantly decreased in the long run). Therefore additional campaigns were launched by the Ministry of Transport of the Czech Republic and the Rail Safety Inspection Office in order to improve safety on level crossings and ensure that the public better understands the issue and that road users behave in a more disciplined way. Despite these initiatives, 17 persons died on railway level crossings.

# 3. Results of safety recommendations and relevant measures that were realized or adopted as a result of individual accidents:

Ref: DUCR-50099/12/Si

Generally, National Investigation Body proposes a safety recommendation. Rail Authority responds to the recommendation on the analysis of an accident. Moreover, Rail Authority urges the entities involved in the accident to adopt their own specific measures and makes other railway undertakings and infrastructure managers aware. Rail Authority recommended safety measures in compliance with the whole range, but above all ones, related to current economic possibilities. They were implemented in the years 2011-2012:

1. Accident from 7/12/2010, Lipová Lázně, train derailment

The railway undertaking adopted the following measures to prevent accidents of this type:

ČD, a. s. issued on 17 January 2011 "Opatření při podezření na tepelné ovlivnění kol tažených vozidel osobní dopravy", No. 135/2011-O12. This instruction prescribes to perform measurements of heat stress, including procedures to determine faulty wheels and resolution procedures of operational staff in DKV.

2. Accident from 20/12/2010, Kamenné Žehrovice, trains collision

The railway undertaking adopted the following measures to prevent accidents of this type:

Improvement of interior safety of vehicles 814 are implemented as ČD and other railway undertakings in cooperation with the manufacturer Pars Šumperk.

3. Accident from 6/1/2011, Vojtěchov, train collision Os 5301 with snow drifts The railway undertaking and infrastructure manager evaluated this event, but did not issue any decision.

Other railway undertakings of nation-wide and regional railroads were informed about the causes of this accident and invited to adopt their own measurements.

4. Accident from 22/1/2011, Brno - Maloměřice, train derailment

The railway undertakings of nation-wide and regional railroads were recommended by Rail Authority to take appropriate internal steps especially. They have to focus on used material, speed limits and inspections of line. SŽDC, s. o., infrastructure manager of nation-wide and regional category, changed the internal regulation "S 2/3 – organizace a provádění kontrol".

5. Accident from 2/2/2012, Vodňany, trains collision,

See accident 1. In addition, an internal measure was decided by railway undertaking at motor units. Passengers are not allowed to stay by the door.

6. Accident from 14/3/2011, Uhersko, broken wheel,

The railway undertaking adopted the following measures to prevent accidents of this type:

ČD, a. s. issued on 21 May 2011 "Opatření k zajištění bezpečného provozu HDV s obručovými koly, jejichž konstrukční rychlost je 120 km/h a vyšší", No. 4/2011-O12.

It comes into force on 23 May 2011. This instruction prescribes to include defectoscopy testing of wheels into the operating rules in that case in which arise a heat-affected of wheels. It also includes technical processes, criteria of admissibility of evidence and results.

Ref: DUCR-50099/12/Si

Bonatrans Group, a.s. is motivated by ČD to detailed specification of hoop's quality. The manufacturer, the company Vitkovice Heavy Machinery, invents as a new way of testing with a higher revelation possible material defects.

7. Accident from 31/3/2011, Čimelice, accident to person caused by rolling stock in motion

The railway undertaking adopted the following measures to prevent accidents of this type:

It refined procedure on departure train when the train crew announces a departure. ČD, a. s. issued on 23 September 2011 "Pokyn vrchního přednosty DKV Plzeň č. 39/2011", which imposes the driver to check closed doors.

#### 8. Accident from 5/6/2011, Vyškov, train derailments

The infrastructure managers of nation-wide and regional railroads were recommended by the Rail Authority to take appropriate internal steps. SŽDC, s. o., infrastructure manager of nation-wide and regional category, changed the internal regulation "S 2/3".

9. Accident from 11/7/2011, Olomouc, train collision with an obstacle

The infrastructure managers adopted the following measures to prevent accidents of this type:

The proposed safety recommendations have been partially implemented. Accident was caused by human factor failure. The infrastructure manager focused on a control of existing regulations.

#### 10. Accident from 29/7/2011, Okříšky-Jihlava, train derailment

The railway undertaking adopted the following measures to prevent accidents of this type:

ČD a.s. adopted its own measurements for the transport of idle locomotives. There shall be an employee during transport in the locomotive. The employee shall have knowledge of Annex 4, Chapter IV, Part D regulation ČD Ok 2.

#### 11. Accident from 17/10/2011, Děhylov, train collision with an obstacle

The railway undertaking adopted the following measures to prevent accidents of this type:

Only ČD a.s. owns vehicles 843. The railway undertaking adopted its own measures for the maintenance of railway vehicles 843. Measurements are focused on inspections of the cardan shaft. The cardan shaft is covered to prevent breakdown of the gearbox, resulting in oil leakage.

#### 12. Accident from 22/10/2011, turning Oder, train derailment

The infrastructure manager adopted the following measures to prevent accidents of this type:

Because accident was caused by human factor failure, the infrastructure manager focused on a control of existing regulations. SŽDC issued on 28 February 2012

"Poučný list č. 2/2012 vrchního přednosty DKV Olomouc". Additionally, the safety recommendations proposed to increase the passive safety by implementation of the ETCS (European Train Control System) on all nation-wide and regional railroads. The implementation is expensive and it will be possible only in relation to the "Národní implementační plán" that is currently being processed by the Ministry of Transport.

Ref: DUCR-50099/12/Si

#### 12. Accident from 5/12/2011, Baska, SPAD

The railway undertaking adopted the following measures to prevent accidents of this type:

Because accident was caused by human factor failure, the railway undertaking focused on a control of existing regulations.

The infrastructure manager is not able to adopt re-establishing the "dispatcher" and application ETCS on all nation-wide and regional railroads - see previous accident.

# E. Important changes in legislation and regulation on railway safety in 2011

The following new legal regulations were issued in 2011:

- Regulation No. 326/2011 Coll. amending the Regulation No. 352/2004 Coll., on the interoperability of the rail system within the Community. This Regulation came into effect on 26 November 2011.
- Act No. 134/2011 Coll. amending the Act No. 266/1994 Coll., on rail systems. This Act came into effect on 25 May 2011.

#### **Third Railway Package**

In 2011, implementation of the Third Railway Package was completed, including the Directive 2007/59/EC of the European Parliament and of the Council of 23 October 2007 on the certification of train drivers operating locomotives and trains on the railway system in the Community and the Directive 2008/57/EC of the European Parliament and of the Council, on the interoperability of the rail system within the Community (see Annex D).

The regulations are detailed in Annex D.

# F. The development of safety certification and authorisation

Ref: DUCR-50099/12/Si

#### 1. National legislation – input data – availability

- 1.1. For issuing safety certificates (safety certification of railway undertakings) according to Article 10 of Directive 2004/49/EC, the date was fixed as of 1 August 2006.
- 1.2. For issuing safety authorisation (safety certification of infrastructure managers) according to Article 11 of Directive 2004/49/EC, the date was fixed as of 1 August 2006.
- 1.3. Information about national safety regulations are available at www.ducr.cz činnosti Národní bezpečnostní úřad (NSA) where regulations and guidelines on notification of national safety rules for infrastructure managers are detailed. Guidelines for preparation of the application for a given safety certificate are to be found on the Rail Authority's web site as well. Relevant forms are in accordance with Commission Regulation (EC) No. 653/2007 of 13 June 2007, Commission Regulation No 1158/2010 of 9 December 2010, Commission Regulation (EC) No 1169/2010 of 10 December 2010.

#### 2. Numerical data

Summary of development of safety certification is given in Annex E.

#### 3. Procedural aspects

#### 3.1. Safety Certificates Part A

- 3.1.1. In 2011, 7 modifications of Certificate Part A were issued. The modifications were caused by organizational changes of railway undertakings, or change of the name of railway undertakings.
- 3.1.2. As is obvious from Table E 4 given in Annex E, issuing time for Part A Certificate did not exceed 120 days while the average time for individual certificates was 40 days. Total average time from submission of the application to the issue of the certificate (including time of suspension of the proceedings in order to complete relevant documentation) was 120 days.
- 3.1.3. In 2011, no foreign safety authority inquired the Rail Authority about the correctness of safety certificate part A issued for railway undertaking that applied for safety certificate type B in other member state.
- 3.1.4. No problems with mutual acceptance of Part A Certificates were being solved in 2011.
- 3.1.5. See Note. Administrative fee for issuing the safety certificate is CZK 1000, i.e. 40 EUR.
- 3.1.6. No problems were associated with issuing the certificates.

3.1.7. The difference between total issuing time for Part A Certificate and the time of the proceedings (120 vs. 40 days) indicates that the applications were and still are submitted incomplete, namely due to imperfectly elaborated safety management system of rail systems operation. The abovementioned issuing times apply to issuing of both certificates at the same time.

Ref: DUCR-50099/12/Si

- 3.1.8. Railway undertakings mentioned common problems that arouse from the new method of dealing with applications for issuing of Part A Certificate that is being introduced in the Czech Republic right now.
- 3.1.9. Railway undertakings can express their opinion when submitting additional documentation.

#### 3.2. Safety Certificates Part B

- 3.2.1. In 2011, 7 modifications of Certificate Part B were issued. The modifications were caused by organizational changes of railway undertakings, or change of the name of railway undertakings
- 3.2.2. Part B Certificates were always discussed together with Part A Certificates see 3.1.2.
- 3.2.3. See Note below.
- 3.2.4. No problems were associated with issuing the certificates.
- 3.2.5. The difference between total issuing time for Part B Certificate and the time of the proceedings (120 vs. 40 days) indicates that the applications were and still are submitted incomplete, namely due to insufficiently documented types of rolling stock, internal operating rules for operation of rail transport, operation of rolling stock etc.
- 3.2.6. Railway undertakings mentioned common problems that arouse from the new method of dealing with applications for issuing of Part B Certificate that is being introduced in the Czech Republic right now.
- 3.2.7. Railway undertakings can express their opinion when submitting additional documentation.

Note to points 3.1.5 and 3.2.3: Legislation of the Czech Republic requires that Part A and Part B certifications of railway undertakings are charged together. The charge amounts to CZK 1000 (= EUR 40).

#### 3.3. Safety Authorisations

- 3.3.1. In 2011, no modification of safety authorization was issued for the infrastructure manager due to the name of the company.
- 3.3.2., 3.3.3 Table E 6 in Annex E indicates that no new safety authorization of infrastructure manager was issued in 2011. Average time to implement the change of safety authorization is 30 days. As the application was complete right after it was submitted, it was not necessary to interrupt the administrative procedure of issuing the safety authorization.
- 3.3.4. No problems were associated with issuing the authorizations.
- 3.3.5. Infrastructure managers can express their opinion when submitting additional documentation.

3.3.6. Management charge for issuing of safety authorization amounts to CZK 1000 (= EUR 40).

Ref: DUCR-50099/12/Si

Note: In general, Czech legislation requires that relevant certificates are dealt with according to the Act No. 500/2004 Coll., the Administrative Procedure Code, as amended, where administrative procedure is defined as 30 to 60-day period, depending on the rate of complexity of individual cases. As this period does not include number of days when the administrative procedure is suspended, the institute of suspension is used practically in all cases in order to allow applicants to submit additional documentation.

# G. Supervision of Railway Undertakings and Infrastructure Managers

# 1. Supervision of Railway Undertakings and Infrastructure Managers

The Rail Authority performs state supervision of railway undertakings and infrastructure managers under conditions defined by the Act on rail systems and implementing regulations of the Act No. 266/1994 Coll., on rail systems. This Act requires that persons authorized to perform state supervision should check whether obligations of rail system owner, infrastructure manager and railway undertaking are observed and fulfilled during operation of rail systems and rail transport. These obligations are defined by law in order to ensure safe operation of rail systems and rail transport.

State supervision concerning railways is performed by the Ministry of Transport, Rail Authority and Rail Safety Inspection Office. Ministry of Transport checks the execution of the state supervision within the framework of the supreme State supervision.

1.1 In 2011, performance of the state supervision was focused by the Rail Authority on fulfilment of obligations given by the Act on rail systems and implementing regulations for infrastructure managers, and railway undertakings (operators). The summary is given in the following table:

The state supervision focused on:	Number of supervisions:	Number of shortcomings:
railway undertakings (operators)	68	49
infrastructure managers	294	62
Total	362	111
out of it on railway crossings	131	32

Character and type of individual shortcomings is given in the following table:

Ref: DUCR-50099/12/Si

	Category	Rail Authority total
1	Unmarked or unsecured railway crossing with ground-based roads at the rail level, or its marking and securing in conflict with conditions stipulated by the rail administration authority (paragraph 6(1) and (2) of the Act No. 266/1994 Coll., on rail systems, as amended (hereinafter referred to as "Act on rail systems").	6
5	Unsecured maintenance and repairs of the rail systems within the scope necessary for its availability, and making connection of the rail system with other rail systems not possible (paragraph 20(1) of the Act on rail systems)	3
6	Unprovided rail system for its operation (paragraph 21 of the Act on rail systems)	1
12	Undesignated stations (stops) (paragraph 22 (1)e of the Act on rail systems)	6
17	Operation of rail transport in conflict with rules for operation of rail transport, valid licence and contract concluded with infrastructure manufacturer (paragraph 35(1)(a) of the Act on rail systems)	2
22	Use specific technological equipment with invalid operability certificate (paragraph 35 (1) d) and paragraph 47 (5) of the Act on rail systems)	1
23	Operation of rail vehicles in the technical conditions, which do not correspond to the approved worthiness (paragraph 35(1)(d) of the Act on rail systems)	3
33	Withhold the Rail Authority the data on the rail vehicle intended for operation on a nation-wide and regional rail system within 15 days (paragraph 49d (3) of the Act on rail systems)	1
40	Shortcomings with use of external lights (paragraph 39 of Decree No. 173/1995 Coll.)	2
46	Other defects	65

To remove deficiencies and detected defects, relevant corrective measures were always taken from the part of infrastructure managers and railway undertakings (operators), and their fulfilment was verified, if possible. As these measures are specific actions of controlled subjects, they are not listed in Part D, Table D.1.2. of this Report.

It should be noted that employees of the Rail Authority performed less state supervisions as compared with 2010. State supervisions will pay increased attention to rail undertakings operating rail transport on nation-wide rail system and regional rail systems, with special emphasis on how they ensure rail transport safety, as well as to nation-wide and regional infrastructure managers with focus on how they implement safety management system in their railway operations.

1.2. Focus of state supervision performed by the Rail Authority (1) from the point of view its individual sections and (2) as the relevant safety authority is demonstrated in Table given in 1.1.: "Character and type of individual shortcomings".

1.2.1. The scale of state supervisions is about the same in the previous period. State supervisions performed by the **Technical Section** found almost no defects to be recorded in the table of categorized shortcomings, or significant shortcomings that would have to be subsequently fined. Most of the identified defects were only minor shortcomings that were recorded in appropriate protocols on state supervision. At the same time, deadlines for removal of these shortcomings were defined. Afterwards, removal of these defects was reported in written to the Rail Authority that checked whether they were really removed or not.

Ref: DUCR-50099/12/Si

- 1.2.2. In 2011, the authorized employees of the Railway Authority, the **Construction section** performed 288 state supervisions. State supervision was focused on fulfilment of obligations of rail system owners, railway undertakings and infrastructure managers. State supervision by authorized employees of the Construction Section focused particularly on:
- ensuring the maintenance and repair of the rail system to the extent necessary for its operability (paragraph 20 (1) of the Act on rail systems),
- perform regular inspections and measuring of the rail system structures in compliance with provisions of Annex 1 of the Ministry of Transport Regulation No. 177/1995 Coll., stipulating construction and technical regulations of rail systems, as subsequently amended (the "Decree")
- •operation of the rail systems without a effective official permission (paragraph 11 (1) of the Act on rail systems)
- designation and safeguarding of the railroad crossing a road at the level of rails (paragraph 6 (1) and (2) of the Act on rail systems)
- operate the rail transport in conflict with the rules for rail transport operation, the effective licence, and the contract concluded with the rail system operator, on operating rail transport on a rail system (paragraph 35 (1)a of the Act on rail systems)
- issue, an internal regulation respecting the rail system operation, the professional competence and knowledge of persons providing for the rail system operation (paragraph 22 (1) b of the Act on rail systems)
- verify whether the structural and operational subsystems meet, in the course of their operation and maintenance, the basic requirements respecting the structural and operational conditions, as well as the technical specifications for interoperability (paragraph 49e of the Act on rail systems)

If shortcomings are found, the rail system owner or railway undertaking or infrastructure manager will be asked to remove them. At the same time, deadlines for removal of these shortcomings were defined.

Special attention will be paid to the railroads included in The European Rail System.

1.2.3. State supervision realized by the **Operational Section** was in 2011 focused on performance of duties of infrastructure managers, railway undertakings and owners

of rail systems or railway sidings, as well as on performance of their duties on selected regional rail systems and tracks of nation-wide rail system. In 2011, state supervisions focused on railway undertakings that operate rail transport on nation-wide rail system and regional rail systems. Special attention was paid to controlling activities performed by infrastructure managers and railway undertakings in order to ensure railway transport safety defined by Regulation No. 376/2006 Coll. implementing regulation on the management system for the rail operation safety and rail transport safety and on procedures in the event of the rise of accidents and incidents in rail systems. Railway Undertaking's safety certificates were checked certificates are defined by paragraph 34h of Act on railway systems.

Ref: DUCR-50099/12/Si

In the vast majority of cases, state supervisions found no defects that should be stated in the table of categorized shortcomings. Most of the identified defects were only minor shortcomings that were recorded in appropriate protocols. At the same time, deadlines for removal of these shortcomings were defined. Afterwards, removal of these defects was reported in written to the Rail Authority that checked whether they were really removed or not. The number of supervisions that were focused on removing the shortcomings was higher in 2011 than in 2010. The shortcomings were mainly removed.

#### **Audits**

Audits performed by safety authority in 2011 were more focused on railway undertakings that received safety certificates and that operate rail transport on nation-wide rail system and regional rail systems. In 2011, the number of audits was by two audits lower than in 2010. Special attention was paid to controlling activities performed by employees in order to ensure railway transport safety, and adherence to the accepted system of ensuring transport safety or its incorporation into organizational chart of individual companies. Here it is mainly a case of establishment of personal responsibility for realization of adopted measures and prevention.

Audits		Issued Safety Certificat es Part A		Issued Safety Authorisations	Other Activities
4. Number of audits of RUs/IMs carried out in 2011	Planned	15	15	*	*
ournou out in 2011	Carried out	15	15	*	*

<sup>\*)</sup> Audits were not carried out in connection with issuing certificates and safety authorizations.

In 2011, the Rail Authority performed 15 audits of railway undertakings. The following companies were audited:

Railway undertaking (operator)
Elektrizácia železníc, Kysak, akciová spoločnosť
FIRESTA-Fišer, rekonstrukce, stavby a.s.
GJW Praha, spol. s r.o.
KŽC Doprava, s.r.o.

Railway undertaking (operator)
Lokálka Group, o.s.
LOKO TRANS s.r.o.
MAX Cargo s.r.o.
Puš, s.r.o.
REGENA spol. s.r.o.
RUTR, spol. s r.o.
SEŽEV-REKO, s.r.o.
Stavební firma CARDA - MÜLLER s.r.o.
TOMI-REMONT a.s.
Trakce, a.s.
VIAMONT a.s.

Audits of railway undertakings have the following scope:

 Implementation of the rail transport safety system and instruments to ensure the system will be observed and communicated to railway undertaking's employees and organizational units.

Ref: DUCR-50099/12/Si

- List of risks, procedures and methods of risk assessments and implementation of measures to reduce risks.
- Definition of responsibility of executives and employees for safety of rail transport.
- Quality of inspections of safe technical condition of rail vehicles.
- Procedures for analysis, training and taking steps to prevent incidents, including removal consequences of accidents.
- Realization of periodical internal inspections of safety assurance system.
- Definition of responsibility for ongoing keeping of records of important parts of the rail transport safety assurance system.
- 5. In 2011, the Rail Authority performed 15 audits after issuing safety certificates, see Table above. The audits did not reveal any serious discrepancies except for several administrative shortcomings (liability to notify neglected, failure to ensure safety system). As railway undertakings took appropriate corrective measures, they did not have to be sanctioned or otherwise penalized (e.g. specification, cancellation or withdrawal of the certificate).
- 6. Complaints from the part of infrastructure managers against railway undertakings were not lodged in 2011.
- 7. Complaints from the part of railway undertakings against infrastructure managers were not also lodged in 2011.

# H. Reporting on the application on the CSM on risk evaluation and assessment

Railway undertakings use common safety methods to implement safety management principles in the form described by Annex III of Directive 2004/49/EC. Common safety targets and national reference values serve as informational basis for railway

undertakings to be able to establish their own safety objectives. Common safety methods for assessing conformity with the requirements for obtaining railway safety certificates (Commission Regulation (EU) No 1158/2010 and 1169/2010) were used in 2011.

Ref: DUCR-50099/12/Si

An Instruction to use the Commission Regulation (EC) No 352/2009 came into effect on 1 January 2011. The Instruction is focused on the adoption of a common safety method on risk evaluation and assessment.

The purpose of this Instruction is to established procedures for relevant employees of the Rail Authority as well as for applicants in terms of using the Commission Regulation (EC) No 352/2009 of 24 April 2009 on the adoption of a common safety method on risk evaluation and assessment, as is stated in Article 6(3) (a) of the Directive 2004/49/EC of the European Parliament and of the Council.

Probability methods of risk assessment are used mainly when assessing function of safety devices. When assessing subsystem, most assessors uses best practice approach, i.e. adhere to national technical standards. Certain assessors also use comparisons with reference system.

The main problem is a different interpretation of "significant changes" by the applicants and by Rail Authority. National regulations do not define it; therefore Rail Authority considers all "significant changes" as subjects to approval. Most changes are not "significant changes" according to applicants. The Commission Regulation (EC) No. 352/2009 has not been included in national regulations and the approval process is, in fact, duplicated. In conclusion, the assessment under the regulation is already in progress.

# I. NSA Conclusions on the reporting year - Priorities

The first priority should be given to the safety of rail systems and transport of passengers and goods, particularly carriage of dangerous goods, with the focus on prevention of precursors that could lead to accidents and incidents.

Goals and plans of the Rail Authority for the next period are as follows:

The Rail Authority met the target in 2011 to perform audits of proper function of safety management. It plans to continue this effort in other infrastructure managers and railway undertakings in 2012.

# **J. Sources of information**

- Annual report for the year of 2011 – Railway Infrastructure Administration, state organization (SŽDC)

- Ministry of Transport Legislation: http://www.mdcr.cz/cs/Legislativa/Legislativa/Legislativa\_CR\_drazni/Legislativa\_CR\_drazni.htm
- Annual reports on safety of operation of rail submitted to Rail Authority as of 30 July 2012 by infrastructure managers based on Regulation No. 376/2006 Coll., on the management system for the rail operation safety and rail transport safety, and on procedures in the event of the rise of accidents and incidents in rail systems.
- Annual reports on safety of operation of rail transport submitted to Rail Authority as of 30. 6. 2012 by railway undertakings based on Regulation No. 376/2006 Coll., on the management system for the rail operation safety and rail transport safety, and on procedures in the event of the rise of accidents and incidents in rail systems.
- Reports on the results of investigation of causes and circumstances of incidents that contain "Safety Recommendations" of the National Investigation Body.
- Documentation of fulfilment of safety recommendations requested from infrastructure managers and railway undertakings.

# K. Annexes

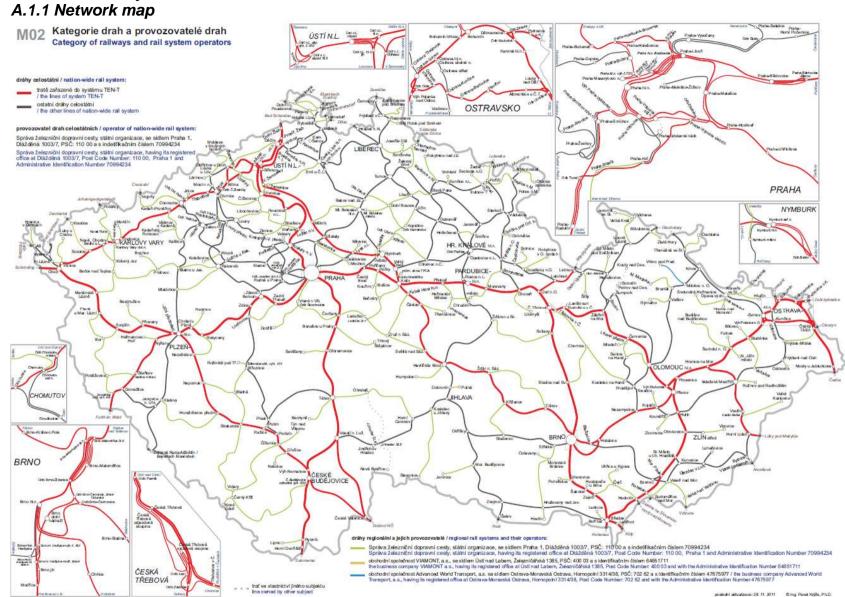
#### **Annex A. Railway Structure Information**

- A.1. Network map
- A.2.1. Infrastructure managers
- A.2.2. Railway undertakings

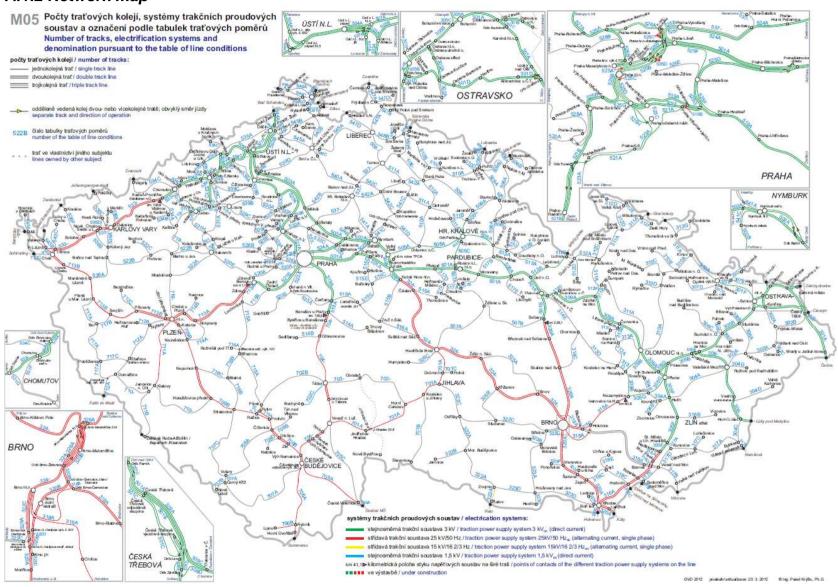
#### **Annex B. Organization chart**

- B.1. Organization chart of the Rail Authority
- B.2. Relationship of the Railway Authority with other national bodies
- Annex C. CSI Data Evidence summary of incidents
- Annex D. Important changes to legislation and regulations
- Annex E. The development of safety certification and authorisation Numerical Data

# RAIL AUTHORITY-CZECH REPUBLIC Annex A. Railway Structure Information



# Annex A. Railway Structure Information A.1.2 Network map



Ref: DUCR-50099/12/Si

Annex A. Railway Structure Information A.2.1. Infrastructure Manager(s)

<del></del>	ir ucture iviariager (s	/	г		1			1	1		
Name-IM	Address	Website/Network	Safety Authorization (Number/Date)	Safety Authorization (Number/Date)	Start Date commercial activity	Total Track Length/Gauge	Electrified Track Length/Voltages	Total Double/Simple Track Length	ATP Equipment used (%)	Number of LC	Number of main (light) signals
České dráhy, a. s.	Praha 1, Nábřeží L. Svobody 1223, PSČ 110 15	www.cd.cz	UP/2008/9004- 9015 (25.8.2008)	OSPD/2007/001 (12.11.2007)	1.10.2008	1/1435	1/3000V ss	1/0	0	3	2
						Remaining tracks	that still holds ČD,a.	s. even after division	on (30/06/2008)		
Správa železniční dopravní cesty, s. o.	Praha 1 - Nové Město, Dlážděná 1003/7, PSČ 110 00	www.szdc.cz	UP/2008/9002 (29.5.2008) UP/2008/9003 (29.5.2008)	OSPD/2008/007 (30.6.2008)	1.7.2008	9470/1435 23/760	3078	7557/1913	0	8095	14752
Advanced World Transport a.s.	Ostrava, Moravská Ostrava, Hornopolní 3314/38, PSČ 70262	www.awt.eu	UP/1997/8005 (30.12.1997)	OSPD/2007/003, (15.10.2007)	25.1.1998	20/1435	0	20/0	0	35	7
VIAMONT a.s	Teplice, Na Letné 835/9, PSČ 415 01	www.viamont.cz	UP/1997/8002 (10.12.1997), UP/1998/8007 (3.6.1998)	OSPD/2007/005, (15.8.2007)	12.12.1997	37/1435	0	37/0	0	34	23
Jindřichohradecké místní dráhy, a.s.	Nádražní 203/II, Jindřichův Hradec, 377 01	www.jhmd.cz	UP/1997/8001 (6.6.1997), UP/1997/8003 (10.10.1997)	OSPD/2007/002, (22.11.2007)	14.6.1997	79/760	0	79/0	0	135	12
SART - stavby a rekonstrukce, a. s.	Šumperk, Uničovská čp. 2944/1 B, PSČ 78701	www.sart.cz	UP/2005/8014 (23.3.2005)	OSPD/2008/004	15.4.2005	22/1435	0	22/0	0	53	12
KŽC Doprava, s.r.o.	Meinlinova 336, Praha 9 – Koloděje, PSČ 190 16	www.kzc.cz	ÚP/2008/8015 (6.5.2008)	OSPD/2011/008	29.6.2011	5/1435	0	5/0	0	7	1

Total length of double-track lines was understood to be the double of construction length of tracks.

Abbreviations: ATP = Automatic Train Protection

= Level Crossing LC

# Annex A. Railway Structure Information A.2.2. Railway Undertaking(s)

A.2.2. Railway	Address	Website/Network	Safety Certifi 2004/4:	9/ES	Start date commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multi ple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport (train km)	Volume of freight transport (train km)
			Number	Date	. 0	ŽDO (;			Р			
≺ailway undertakings Advanced World Transport a.s.	Ostrava - Moravská Ostrava, Hornopolní 3314/38, PSČ 702 62	tion-wide rail system o	CZ11200800002	16.1.2008	1.5.1995	VN	uding rented	tracks) – acc	ording to outpu 0/2594	140/224	0	1 571 000
ARRIVA vlaky s.r.o.	Praha 5, Radlická 1c/3185 PSČ 150 00	www. arriva.co.uk	CZ1120100004	17.2.2010	23.11.2009	0	0	5	0	0	0	
AŽD Praha s. r. o.	Praha 10, Žirovnická 2/3146, PSČ 10617	www.azd.cz	CZ1120080045	31.7.2008	15.2.1996	Т	10	0	0/10	7/0		1 279
BF Logistics s.r.o.	Praha 9, Beranových 65, PSČ 19902	www.bfl.cz	CZ1120070003	28.5.2007	1.3.2007	٧	9	0	0/5	9/4		110 000
CZ Logistics, s.r.o.	Česká Třebová, Semanínská 580 PSČ 56002	www.czlog.cz	CZ1120070004	20.6.2007	1.11.2006	LTO	1	0	0	10	0	47 077
ČD Cargo, a. s.	Jankovcova 1569/2c, Praha 7, PSČ 170 00	www.cdcargo.cz	CZ1120070009	30.11.2007	1.12.2007	OVLTNZ	873	0	53/27116	2208/352	0	28 621 325
České dráhy, a. s.	Praha 1, Nábřeží L. Svobody 1222, PSČ 110 15	www.cd.cz	CZ1120080008	26.3.2008	1.11.2003	OVLTNZ	748	826	3035/142	4020/3434	122 219 000	20 000
DBV-ITL, s. r. o.	Kolín IV, Polepská 867, PSČ 28002	www.dbv-itl.cz	CZ1120080006	25.3.2008	29.4.2003	VL	1	0	0	1/0		147
EDIKT a.s.	České Budějovice, Rudolfovská 461/95 PSČ 370 01	www.edikt.cz	CZ1120070011	19.12.2007	18.12.2007	Т	6	0	0/1	6		0
Elektrizace železnic Praha a.s.	Praha 4, Nusle, nám. Hrdinů 1693/4a, PSČ 14000	www.elzel.cz	CZ1120080007	25.3.2008	1.4.1996/ 1.9.1996	Т	19	0	0/176	10/34	0	26 987
Elektrizácia železníc Kysak a. s.	Praha 4, Nusle, Nám. Hrdinů 1693/4a, PSČ 14000	www.ezkysak.sk	CZ1220080019	29.5.2008	7.1.2008	V	3	0	0/36	3/3		472
EŽC a.s.	Praha 4, Nusle, Nám. Hrdinů 1693/4a, PSČ 14000		CZ 1120100013	19.10.2010	1.4.2011	Т	0	0	0	0	0	0

Name	Address	Website/Network	Safety Certifi 2004/4		Start date commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multi ple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport (train km)	Volume of freight transport (train km)
			Number	Date								
EUROVIA CS,a. s. (do 31.3.2011 Stavby silnic a žel.)	Praha 1, Národní třída 10, PSČ 11319	www.ssz.cz	CZ1120080024	13.6.2008	15.6.2003	Т	7	0	0/0	8/0		0
FIRESTA-Fišer, rekonstrukce, stavby a.s.	Mlýnská 68, Brno, PSČ 602 00	www.firesta.cz	CZ1120080037	11.9.2008	1.1.2008	VT	2	0	0	2/2		
GJW Praha spol. s r.o.	Praha 9 - Hloubětín, Mezitraťová 137, PSČ 198 21	www.gjw-pha.cz	CZ11200800014	22.4.2008	15.10.1995	VT	6	0	0/26	5/4	50 000	
Chládek & Tintěra, a.s.	Litoměřice, Nerudova 16, PSČ 412 01	www.cht.cz	CZ11200800013	22.4.2008	1.1.2002	ОТ	2	0	0/25	3/1	0	25 100
Chládek a Tintěra, Pardubice, a.s.	Pardubice, Zelené Předměstí, K Vápence 2677, PSČ 53002	www.cht-pce.cz	CZ11200800035	5.9.2008	1.4.1996	Т	12	0	0/0	18/0		
Chládek a Tintěra Havlíčkův Brod, a.s.	Havlíčkův Brod, Průmyslová 941 PSČ 580 01	www.chladek-tintera.cz	CZ1120080001	14.1.2008	6.4.2005	Т	3	0	1/0	3/0		0
IDS CARGO a. s.	Olomouc, Albertova 21, PSČ 77900	www.ids-cargo.cz	CZ11200800043	5.12.2008	6.1.1900	V	3	0	0/10	31/2		103 000
IDS-lnženýrské a dopravní stavby Olomouc a. s.	Olomouc, Albertova 229/21, PSČ 779 00	www.ids-olomouc.cz	CZ11200800018	10.3.2008	20.8.2001	VT	27	0	0/42	5/0		1 500
JARO Česká Skalice, s. r. o.	Česká Skalice, Havlíčkova 610, okres Náchod, PSČ 55203	www.jarocs.cz	CZ11200800029	1.7.2008	23.4.2001	Т	2	0	0/4	2/0		0
Jindřichohradecké místní dráhy, a. s.	Jindřichův Hradec, Nádražní 203/II, PSČ 377 01	www.jhmd.cz	CZ1120070008	22.11.2007	1.7.1997	VONTL	15	1	36/31	15/13	368 000	13 000
KK - provoz a opravy lokomotiv s.r.o.	Býškovice, č.p. 108, PSČ 753 53		CZ11200800022	12.6.2008	15.12.2003	Т	9	0	0	26/0		13 301
KŽC Doprava, s.r.o.	Praha 9, Koloděje, Meinlinova 336, PSČ 19016	www.kzc.cz	CZ11200800041	10.11.2008	15.3.2006	VONTL	4	6	6	12/14	33 000	2 000
LEO Express, a.s. (dříve RAPID Express, a.s.)	Praha 5, Kutvirtova 339/5, PSČ 150 00	www.le.cz	CZ1120110007	8.9.2011	15.3.2010	VO	6	0	0/0	0/0		
Lokálka Group, občanské sdružení	Rokycany, Plzeňská 334, PSČ 33701	www.lokalkagroup.cz	CZ11200800040	5.11.2008	15.4.2005	OVN	3	0	0	3/0	5 328	56

Name	Address	Website/Network	Safety Certifi 2004/4	icate A - B 9/ES	Start date commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multi ple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport (train km)	Volume of freight transport (train km)
			Number	Date								
LOKO TRANS s r. o.	Brno, Voříškova 2, PSČ 623 00	www.lokotrans.cz	CZ1120070006	12.11.2007	29.5.1999	LTO	0	0	0	3/0	0	132 980
LTE Logistik a Transport Czechia s.r.o.	Šilheřovice, Dolní 404, PSČ 74715	www.lte-czechia.cz	CZ1120090012	14.7.2009	1.12.2005	٧	0	0	0	4/2		136 523
MAX Cargo s.r.o.	Praha 9, U Skládky 1695, PSČ 190 00		CZ1120090018	23.12.2009	23.12.2009	V	0	0	0	0		
MBM rail, s.r.o.	Jaroměř, Žižkova 595, PSČ 551 01	www.mbmr.cz	CZ1120100014	3.12.2010	3.12.2010	OV	1	1	0	0	11 000	1 000
METRANS a. s.	Praha 10, Podleská 926	www.metrans.cz	CZ1120090010	9.6.2009	1.9.2008	V	4	0	0/1060	7/0		36
METRANS Rail s.r.o. (dříve RAILTRANSPORT s r. o.)	Praha 10, Podleská 926, PSČ 104 00	www.metransrail.eu	CZ11201100006	23.8.2011	10.1.2004	NTVO	4	0	2/0	16/0	0	200 000
MIKO Havlíčkův Brod spol. s.r.o.	Havlíčkův Brod, Havířská 1837, PSČ 580 01	www.mikohb.cz	CZ1120080030	2.7.2007	2.7.2007	Т	3	0	0	3/3		0
N+N-Konstrukce a dopr. stav. Litoměřice, s. r. o.	Litoměřice, Nerudova 2215, PSČ 412 01	www.nanlitomerice.cz	CZ11200800044	15.12.2008	13.7.1998	Т	1	0	1	7/0		3 346
NOR, a.s.	Trutnov, Horní předměstí, Lipová 509, PSČ 541 01	www.nor.cz	CZ1120070002	26.3.2007	19.9.2003	Т	3	3	0	2/3		0
OHL ŽS, a. s.	Brno - Veveří, Burešova 938/17, PSČ 66002	www.ohlzs.cz	CZ11200800012	21.4.2008	1.12.2004	V	0	0	0/28	7/5		20 146
OLOMOUCKÁ DOPRAVNÍ s.r.o.	Olomouc, Neředín, gen.Píky 491/2, PSČ 77900	olomouckadopravni.cz	CZ1120070005	8.8.2007	20.1.2007	ov	2	0	0/18	2/2		14 000
Ostravská dopravní společnost, a.s.	Ostrava, Přívoz, U Tiskárny 616/9, PSČ 70200	www.odos.cz	CZ11200800016	7.5.2008	10.8.2004	VT	25	0	0/0	23/0		190 000
PKP Cargo	Warszawa, Grójecka 17, PSČ 02-021	www.pkp-cargo.pl	CZ1220100002	18.1.2010	18.1.2010	V	14	0	0	35/0		890 000
Puš s.r.o.	Dvůr Králové, Bezručova 1665, PSČ 54402	www.pussro.net	CZ11200800039	2.10.2008	10.6.1995	VNO	1	0	5/0	1/1	0	1 000
Prvá slovenská železničná a.s.	Bratislava, Růžová dolina 10, PSČ 821 09	www.psz.vdt	CZ1220080019	28.12.2008	19.4.2004	٧	4	0	0/225	3/0		1 848
RegioJet, a.s.	Brno, Náměstí Svobody 86/17, PSČ 602 00	www.regiojet.cz	CZ1120100008	16.4.2010	1.11.2009	0	2	0	0/0	0/0	284 000	7 000

Name	Address	Website/Network	Safety Certifi 2004/49		Start date commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multi ple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport (train km)	Volume of freight transport (train km)
			Number	Date								
RETROLOK s r.o.	Praha 10 – Vršovice, 28.pluku 128/12,okres Praha Hl.m., PSČ101 00	http://www.retrolok.cz	CZ1120110009	2.11.2011	15.7.2011	0	0	0	0	0	0	0
RM LINES, a. s.	Sokolov, Jednoty 1931, PSČ 356 01	www.rmlines.cz	CZ11200800020	3.6.2008	25.8.2005	V	2	0	0/0	0		24 000
RUTR, spol. s r. o.	Praha 4, Chodovská 7, PSČ 14100	www.rutr.cz	CZ11200800025	17.6.2008	1.1.2001	Т	0	0	0/0	0		
SANRE, spol. s r. o.	Bohumín, Nový Bohumín, Lidická č.p. 219, PSČ 73581	www.sanre.cz	CZ11200900005	24.3.2009	15.8.1996	Т	1	1	0/0	3/0		0
SART - stavby a rekonstrukce, a. s.	Šumperk, Uničovská čp. 2944/1 B, PSČ 78701	www.sart.cz	CZ1120080009	8.4.2008	15.4.2005	Т	1	0	0/0	2/0	272 000	0
SD - Kolejová doprava, a. s.	Kadaň, Tušimice 7, PSČ 43201	www.sd-kd.cz	CZ1120070001	1.10.2007	1.9.2006	N	26	0	0/180	14/12		132 000
SEŽEV-REKO, a.s.	Brno, Maloměřice, Jarní 898/50, PSČ 61400	www.sezev-reko.cz	CZ1120080026	17.6.2008	5.5.1997	Т	8	0	0/6	8/0		45 030
SGJW Hradec Králové, spol. s r. o.	Hradec Králové, Na Důchodě čp. 1674, PSČ 50002	www.sgjw.cz	CZ1120080023	12.6.2008	1.11.1995	Т	1	0	0/3	2/6		6 000
Skanska a.s.	Praha 4, Líbalova 2348/1, PSČ 149 00	www.skanska.cz	CZ1120080021	3.6.2008	1.9.2002	TV	10	0	0/34	11		50 000
Slezské zemské dráhy o.p.s.	Bohušov č.p.15, PSČ 793 99		CZ1120080027	19.6.2008	15.6.2006	VOTL	*	*	*	*	1 000	2 000
SLEZSKOMORAVSKÁ DRÁHA a. s.	Ostrava, Slezská Ostrava, Michálkovická ul.č.86/1942, PSČ 710 00	www.slezskomoravskadrah a.cz	CZ1120080032	7.7.2008	20.3.1998	TV	9	0	0	20/20		6 500
Slovenská železničná dopravná spoločnosť, a.s.	Na Štepnici 1379/1, Zvolen		CZ1220080032	16.7.2009			8	0	0	31		1 000
Sokolovská uhelná, právní nástupce, a.s.	Sokolov, Staré náměstí 69, PSČ 35601	www.suas.cz	CZ1120070007	21.11.2007	15.6.1996	V	12	0	0/116	14/30		42 400
Správa železniční dopravní cesty, s. o.	Dlážděná 1003/7, Praha 1, PSČ 110 00	www.szdc.cz	CZ1120080028	30.6.2008	1.7.2008	ОТ	1	0	0/259	1/356	0	2 700 000

Name	Address	Website/Network	Safety Certifi 2004/4		Start date commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multi ple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport (train km)	Volume of freight transport (train km)
			Number	Date	1							
Stavební firma CARDA- MULLER s. r. o.	Olomouc, Chválkovice, Chválkovická 332/17, PSČ 773 00	www.carda-muller.cz	CZ1120090001	3.2.2009	1.5.2001	Т	1	0	0	1/0		0
STAVEBNÍ OBNOVA ŽELEZNIC a. s.	Olomouc, Libušina 103, PSČ 77200	<u>www.soz.cz</u>	CZ1120080003	23.1.2008	1.3.1999	Т	0	0	0/0	0/4		618
TCHAS ŽD s.r.o.	Ostrava, Poruba, Francouzská 6167, PSČ 70800		CZ1120090007	15.4.2009	1.12.2008	Т	1	0	0	4/0		0
TOMI - REMONT a. s.	Prostějov, Přemyslovka č.p. 2514/4, PSČ 79601	www.tomi-remont.cz	CZ1120080017	14.5.2008	2.10.1995	Т	9	0	0/17	18/24		36 000
TORAMOS, s. r. o.	Český Těšín, ul. Tovární 1001/129, PSČ 73701	www.toramos.cz	CZ1120080046	17.12.2008	1.4.1996	Т	2	0	0/0	4/0		763
Trakce, a. s.	Ostrava- Moravská Ostrava a Přívoz, Hlávkova č. 428/3, PSČ 70200	www.trakce.cz	CZ1120090002	20.2.2009	20.8.2002	Т	3/1	0	0/16	2/3		1 881
TRAMO RAIL, a. s.	Olomouc, Železniční 547/4, PSČ 77200	www.tramo-rail.cz	CZ1120070031	7.7.2008	31.3.2000	Т	4	4	0/0	2/5		0
Traťová strojní společnost, a.s.	Ostrava - Přívoz, Na Valše 676/18, PSČ 702 00	www.tssas.cz	CZ1120080011	21.4.2008	1.2.2005	TV	33	0	0/868	21/21		227 00
UNIPETROL DOPRAVA, a.s.	Litvínov - Růžodol č.p. 4, 436 70 Litvínov	www.unipetroldoprava.cz	CZ1120070010	11.12.2007	1.1.1996	V	38	0	0/0	22/2		
Veolia Transport Morava, a. s.	Ostrava, Moravská Ostrava, Vítkovická 3133/5, PSČ 70200	www.morava.veolia- transport.cz	CZ1120080036	10.9.2008	11.12.2005	OVT	3	1	2/0	9/9		0
VIAMONT a.s. (včetně pronajatých tratí)	Teplice, Na Letné 835/9, PSČ 415 01	www.viamont.cz	CZ120080005	6.2.2008	2.10.1995	ОТ	0	9	0/5	45/0	421 000	2 000
Viamont DSP, a. s.	Ústí nad Labem, Železničářská čp.1385, PSČ 400 03	www.viamont.cz/dsp	CZ1120080010	10.4.2008	10.11.2001	VT	9	0	0/83	33/8		62 878

Name	Address	Website/Network	Safety Certificate A - B 2004/49/ES		Start date commercial activity	Traffic Type	Number of Locomotives	Number of Railcars/Multi ple Unit-sets	Number of Coaches/ Wagons	Number of train drivers/safety crew	Volume of passenger transport (train km)	Volume of freight transport (train km)
			Number	Date								
GW Train Regio a.s.	Ústí nad Labem - Střekov, U Stanice 827/9, PSČ 400 03	www.gwtr.cz	CZ1120100003	5.2.2010	1.3.2010	0	5	0/23	5/0	27/24	978 000	
VÍTKOVICE Doprava, a. s.	Ostrava, Moravská Ostrava, ulice 1. máje 3302/102 A, PSČ 70300	www.doprava.vitkovice.cz	CZ1120080034	3.9.2008	10.6.2004	V	3	0	0/59	5/4		8 641
Vogtlandbahn-GmbH, organizační složka	Hrádek nad Nisou, Oldřichovská 696, PSČ 463 34	www.vogtlandbahn.de	CZ1220100012	28.6.2010	11.12.2010	OL	0	0/8	0/0	14/13		
ZABABA, s. r. o.	Praha 5 - Smíchov, Radlická 2001/56, PSČ 150 00	www.masinka.cz	CZ1120090009	20.4.2009	10.7.2004	VON	1	0	0/0	4/2	6 000	8 000

### RAIL AUTHORITY-CZECH REPUBLIC

Ref: DUCR-50099/12/Si

Railway undertaking	operating on a regional rail	system whose infrastructure manage	er is not SŽDC (but JHMD or SART)

Name	Address	Website/Network	Safety Certifi 2004/49		Start date commercial	Traffic	Number of		Number of train drivers/	Volume of passenger	vers/ passenger	Volume of freight
		Website/Network	Number	Date	activity	Type	Locomotives	Multiple Unit-sets	Wagons	safety crew	transport (train km)	transport (train km)
Jindřichohradecké místní dráhy, a. s.	Nádražní 203/II, Jindřichův Hradec, 377 01	www.jhmd.cz	CZ1120070008	22.11.2007	1.7.1997	OVTLN	15	1	36/31	15/13	368 000	1 300
Veolia Transport Morava, a. s.	Ostrava, Moravská Ostrava, Vítkovická 3133/5, PSČ 70200	www.morava.veolia- transport.cz	CZ1120080036	10.9.2008	11.12.2005	OV	3	1	2	9/9	244 000	
KŽC Doprava, s.r.o.	Praha 9, Meinlinova 336, PSČ 190 16	www.kzc.cz	CZ1120080041	10/11/2008	13.2.2006	OVTLN	5	8	4/4		33 000	2 000

#### Note:

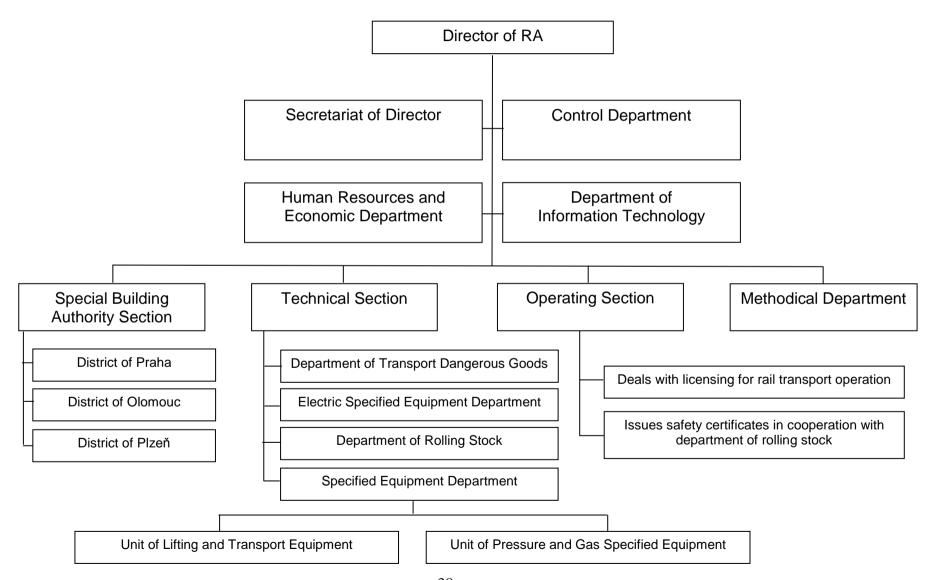
- 1. All railway undertakings that received Safety Certificates Part A in the Czech Republic obtained also Part B.
- 2. No certificate issued according to 2001/14/EC is valid in the Czech Republic since 2009.

## Traffic Type:

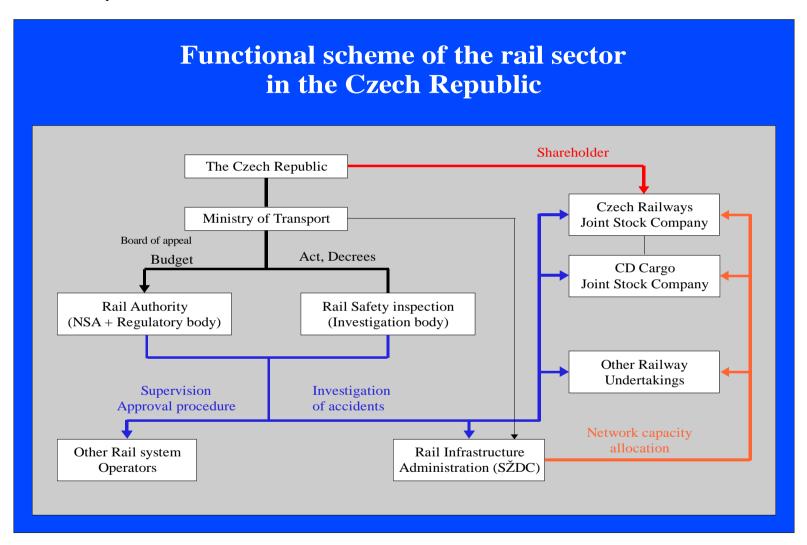
- O passenger transport
- V freight transport
- Z transport of animals
- *T transport track machinery*
- L transport vehicles (locomotives) in connection with their repair and test
- N nostalgic driving

Annex B. Organization chart(s) of the National Safety Authority B.1 Chart: Internal organization

# Organizational structure RA



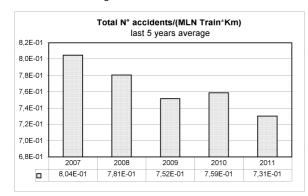
# Annex B. Organizational chart(s) of the National Safety Authority B.2 Chart: Relationship with other National Bodies

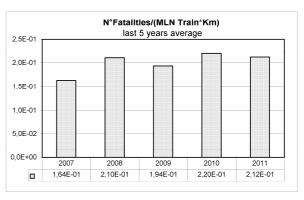


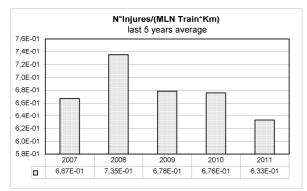
## Annex C. CSIs data - Definitions applied

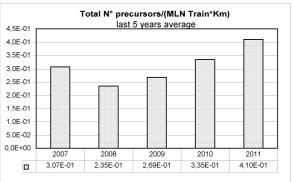
### C.1 CSI data

Performances at a glance











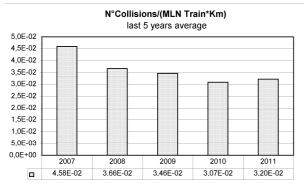
2007 report: values related to 2006.

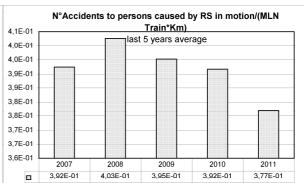
2008 report: values related to the average between 2006 and 2007. 2008 report: values related to the average among 2006, 2007 and 2008.

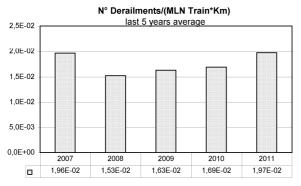
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

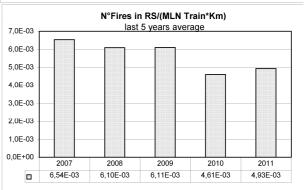
#### Ref: DUCR-50099/12/Si

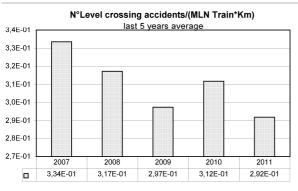
#### Accidents divided by type

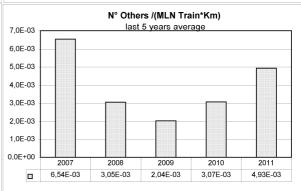












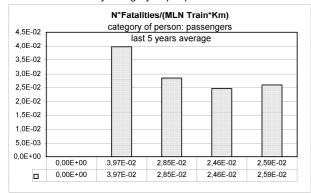
2007 report: values related to 2006.

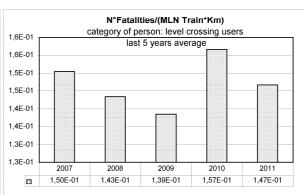
2008 report: values related to the average between 2006 and 2007.

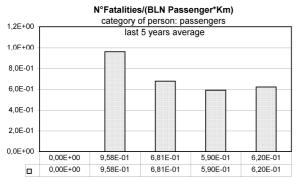
2008 report: values related to the average among 2006, 2007 and 2008

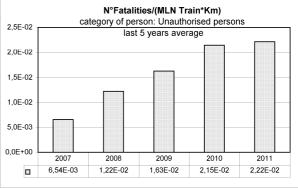
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

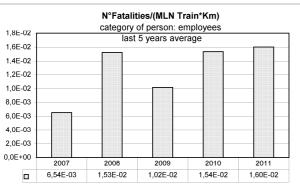
#### Fatalities divided by category of people involved

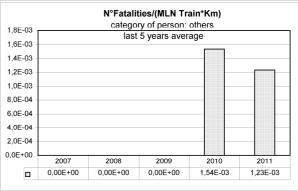










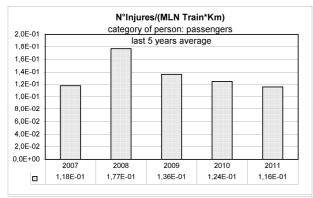


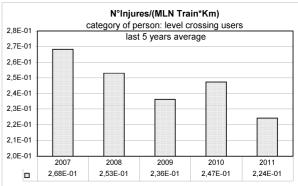
2007 report: values related to 2006

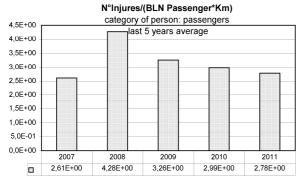
2008 report: values related to the average between 2006 and 2007. 2008 report: values related to the average among 2006, 2007 and 2008

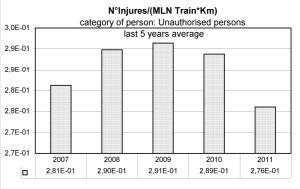
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

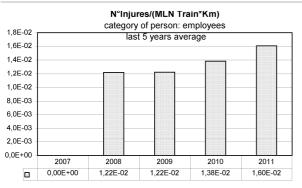
#### Injures divided by category of people involved

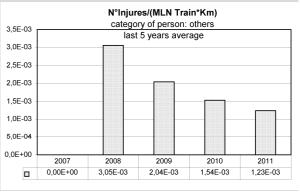












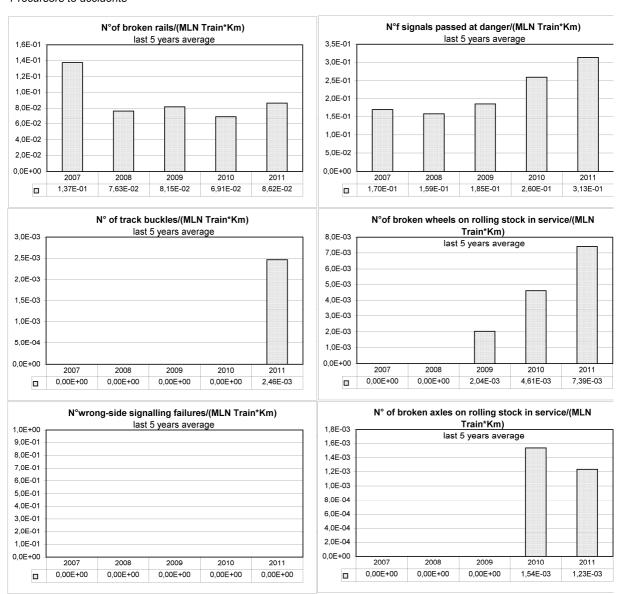
2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007

2008 report: values related to the average among 2006, 2007 and 2008. 2009 report: values related to the average among 2006, 2007, 2008 and 2009

#### Ref: DUCR-50099/12/Si

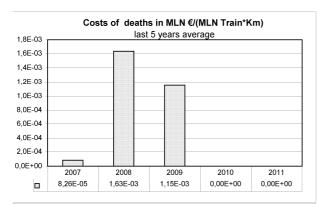
#### Precursors to accidents

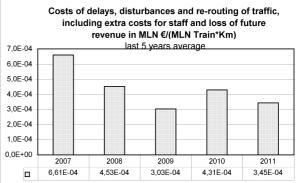


2007 report: values related to 2006.

2008 report: values related to the average between 2006 and 2007.
2008 report: values related to the average among 2006, 2007 and 2008.
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

Cost of all accidents, number of working hours of staff and contractors lost as a consequence of accidents

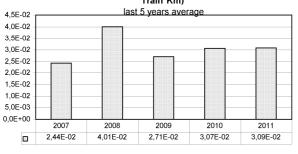








#### Costs of replacement or repair of damaged rolling stock and railway installations in MLN €/(MLN Train\*Km)

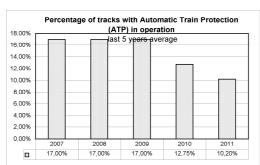


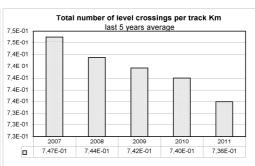
2007 report: values related to 2006.

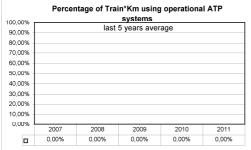
2008 report: values related to the average between 2006 and 2007. 2008 report: values related to the average among 2006, 2007 and 2008

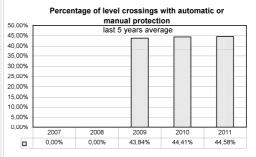
2009 report: values related to the average among 2006, 2007 and 2006. 2009 report: values related to the average among 2006, 2007, 2008 and 2009.

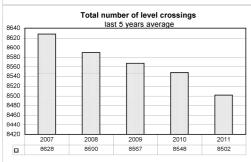
Technical safety of infrastructure and its implementation, management of safety

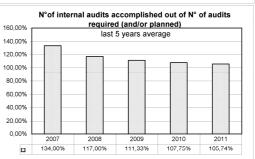


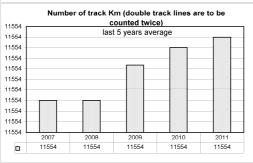












2007 report: values related to 2006.
2008 report: values related to the average between 2006 and 2007.
2008 report: values related to the average among 2006, 2007 and 2008.
2009 report: values related to the average among 2006, 2007, 2008 and 2009.

## C.2 Definitions used in the Annual report

# C.2.1. Definitions from Regulation (EC) No 91/2003 of the European Parliament and of the Council:

Ref: DUCR-50099/12/Si

- "Accident" means an unwanted or unintended sudden event or a specific chain of such events which have harmful consequences; accidents are divided into the following categories: collisions, derailments, level crossing accidents, accidents to persons caused by rolling stock in motion, fires in rolling stock and others.
- "Deaths (killed person)" means any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides
- "Significant accident" means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person, or in significant damage to stock, track, other installations or environment, or extensive disruptions to traffic. Accidents in workshops, warehouses and depots are excluded; As accidents are unwanted and unintended, they cannot result from vandalism, suicide and terrorist attacks.
- "Extensive damage" to vehicles, tracks, other installations or environment means damage that can immediately be assessed by the investigating body to cost at least EUR 150,000 in total.
- "Extensive interruption of rail traffic" means traffic interruption on the railway line for more than 6 hours.
- "Injuries (Serious injured person)" means any accident involving at least one rail vehicle in motion, resulting in at least one killed or seriously injured person. Accidents in workshops, warehouses and depots are excluded.
- "Injuries (seriously injured person)" means any person injured who was hospitalized for more than 24 hours as a result of an accident, excluding attempted suicides
- "Collisions of trains, including collisions with obstacles within the clearance gauge" means any head-on or rear collision of two trains or sideswipe collision of the train with part of other train that interferes in the clearance gauge, or collision of the train with:
- a) shunting vehicles;
- b) fixed obstacles such as buffer-blocks;
- c) objects temporarily placed on or near rails (except for objects on the level crossing that were lost by passing cars or other road users) such as rocks, landslides, trees, lost parts of rail vehicles, vehicles and machines or equipment used to maintain the tracks.
- "Train derailment" means any event when at least one wheel of the train leaves the track.
- "Level crossing accident" means any accident on the level crossing involving at least one rail vehicle and one or more crossing vehicles, other level crossing users such as pedestrians or other objects temporarily present on or near the track that were lost by crossing vehicles or other level crossing users.
- "Accidents to persons caused by rolling stock in motion" are accidents involving one or more persons who were either knocked down by a rail vehicle or an object loaded on the vehicle or having fallen from the vehicle. Number of persons who fell out of rail vehicles includes also persons who fell, or were hit by a lost object that was transported by the vehicle.
- "Rolling stock fire" means any fire and explosion in rolling stock (including the cargo) when being transported between loading station and unloading station (including intermediate stations and marshalling works) corresponds to damage assessed to cost at least EUR 150,000 in total.

"Rail passenger" means any person, excluding members of the train crew, who makes a trip by rail. For accident statistics, passengers trying to embark/disembark onto/from a moving train are included;

Ref: DUCR-50099/12/Si

- "Person killed" means any person killed immediately or dying within 30 days as a result of an accident, excluding suicides;
- "Person injured" means any person injured whose injury required medical treatment.
- "Person seriously injured" means any person injured who was hospitalized for more than 24 hours as a result of an accident;
- "Suicide" means an act to deliberately injure oneself resulting in death, as recorded and classified by the competent national authority;
- "Employee" (contractual employees and contractual natural persons included) means any person employed by rail transport operator who is in work at the moment of the accident. Included are train crews and staff handling rolling stock and transport infrastructure installations.
- "Level crossing user" means any person who uses a level crossing to cross a railway track by any means of transport or by walking.
- "Person moving along the railway track without permission (unauthorized person)" means any person moving along the railway track without permission, except for level crossing users.
- "Train" means one or more railway vehicles hauled by one or more locomotives or railcars, or one railcar travelling alone, running under a given number or specific designation from an initial fixed point to a terminal fixed point. A light engine, i.e. a locomotive travelling on its own, is not considered to be a train
- "Train-km" means the unit of measure representing the movement of a train over one kilometre. The distance used is the distance actually run, if available, otherwise the standard network distance between the origin and destination shall be used. Only the distance on the national territory of the reporting country shall be taken into account.
- "Passenger-km" means the unit of measure representing the transport of one passenger by rail over a distance of one kilometre. Only the distance on the national territory of the reporting country shall be taken into account.

#### C.2.2. National definitions

## Total number of other incidents – precursors divided to the following groups

- "Broken rail" means disruption of rail integrity that makes it impossible for a rail vehicle to cross the damaged place.
- "Track buckles" is a horizontal or vertical change of the rail position due to excessive transversal and longitudinal resistance and buckling resistance of the rail that makes it impossible for a rail vehicle to cross the damaged place.
- "Wrong-side signalling failures" occurs when a signalling device is not in a condition to ensure safe rail transport or to avert danger to rail transport due to a defect of any of its components.
- "Unauthorized running through a prohibitive aspect" means that a rail vehicle jumps a prohibitive signal aspect.
- "Broken wheel or axle of rail vehicle" means a disruption of integrity of wheel (axle) by internal and external causes (material or manufacturing defects etc.) due to which the rail vehicle must be put out of service.

### C.3. Abbreviations

CSI Common Safety Indicator ERA European Railway Agency

LC Level Crossing

MLN 10<sup>6</sup> BLN 10<sup>9</sup>

NSA Network Safety Authorities

RS Rolling Stock

RU/IM Railway Undertaking and Infrastructure Manager

DÚ Rail Authority

DI Rail Safety Inspection Office

SŽDC Správa železniční dopravní cesty – the Railway Infrastructure

Administration, state organization (main infrastructure manager of

Ref: DUCR-50099/12/Si

nation-wide rail system and regional rail system)

ČD České dráhy, a.s. (Czech Railways, j.s.c., main railway undertaking for

passenger transport)

MU mimořádná událost (incident)

UTZ určené technické zařízení (specified technical equipment)

DKV rail vehicle depot

DV rail vehicle

HDV driving rail vehicle SD state supervision TDV trailer vehicle

CSI Common Safety Indicators ERA European Railway Agency

# Annex D. Important changes to legislation and regulations

	Legal reference or Notif- IT code	Date legislation comes into force	Reason for introduction (Additionally specify new law or amendment to existing legislation)	Description
General national railway safety legislation	NONE			
Legislation concerning the national safety authority	NONE			
Legislation concerning notified bodies, assessors, third parties bodies for registration, examination, etc.	NONE			
National rules concerning railway safety				
Rules concerning national safety targets and methods	NONE			
Rules concerning requirements on SMS and safety certification of RUs	NONE			
Rules concerning requirements on SMS and Safety Authorisation of IMs	NONE			

# RAIL AUTHORITY- CZECH REPUBLIC

Ref: DUCR-50099/12/Si	Ref:	DUCR-	-50099	/12/Si
-----------------------	------	-------	--------	--------

Rules concerning requirements for wagon keepers	NONE			
Rules concerning entities in charge of maintenance				
Rules concerning requirements for maintenance workshops	NONE			
National safety rules for RUs* and safety rules for other railway actors				
Rules concerning requirements for the authorisation of placing in service and maintenance of new and substantially altered rolling stock, including rules for exchange of rolling stock between RUs, registration systems and requirements on testing procedures	NONE			
Common operating rules of the railway network, including rules relating to the signalling and traffic procedures	Decree No. 326/2011 Coll. Amending the Decree No. 352/2004 Coll.	26 November 2011	Amendment to existing legislation	Transposition of Directive 2008/57/EC on the interoperability of the rail system within the Community

# RAIL AUTHORITY- CZECH REPUBLIC

Ref: DUCR-50099/12/Si	Ref:	DUCR-	-50099	/12/Si
-----------------------	------	-------	--------	--------

Common operating rules of the railway network, including rules relating to the signalling and traffic procedures	Act No. 134/2011 Coll. Amending the Act No. 266/1994 Coll.	25 May 2011	Amendment to existing legislation	Transposition of Directive 2008/57/EC on the interoperability of the rail system within the Community
Rules laying down requirements on additional internal operating rules (company rules) that must be established by the IMs and RUs	Act No. 134/2011 Coll. Amending the Act No. 266/1994 Coll.	25 May 2011	Amendment to existing legislation	Transposition of Directive 2007/59/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure
Rules concerning requirements on staff executing safety critical tasks, including selection criteria, medical fitness and vocational training and certification	Act No. 134/2011 Coll. Amending the Act No. 266/1994 Coll.	25 May 2011	Amendment to existing legislation	Transposition of Directive 2007/59/EC on the certification of train drivers operating locomotives and trains on the railway system in the Community into Czech law
Rules concerning the investigation of the accident and incidents including recommendation	NONE			
Rules concerning requirements for national safety indicators including how to collect and analyse the indicators	NONE			

## RAIL AUTHORITY- CZECH REPUBLIC

Rules concerning requirements for

into service

authorisation of placing

crossing, platforms, etc.)

infrastructure (tracks, bridges, tunnels, energy, ATC, radio, signalling, interlocking, level NONE

Ref: DUCR-50099/12/Si

<sup>\*</sup>If there are rules for IMs similar as national safety rules for RUs (type 1, type 4 to type 7 national safety rules in the annex II of the RSD) /1/ these should be reported.

Information on operating rules, staff requirements an accident investigation should include information on national rules for the transport of dangerous goods.

# ANNEX E: The development of safety certification and authorization – Numerical Data

## E.1. Safety Certificates according to Directive 2001/14/EC

	bring licensed in Czech Republic	0
Directive 2001/14/EC, held by Railway Undertakings in year 2011	in another Member State	0

## E.2. Safety Certificates according to Directive 2004/49/EC

		New	Updated/amended	Renewed
E.2.1 Number of valid Safety Certificates  Part A held by Railway Undertakings in the year 2011	Being registered in the Czech Republic	74	26	0
	Being registered in another Member State	0	0	0

Ref: DUCR-50099/12/Si

Note:74 new certificates part A should be understood as 71 valid certificates issued in previous years + 3 new certificates issued in 2011; 26 issued amendments of certificates part A should by understood as 19 valid amendments issued in previous years + 7 amendments issued in 2011.

		New	Updated/amended	Renewed
E.2.2 Number of valid Safety Certificates  Part B held by Railway Undertakings in the year 2011	Being registered in the Czech Republic	77	26	0
	Being registered in another Member State	8	0	0

Note: 77 new certificates part B should be understood as 71 valid certificates issued in previous years + 6 new certificates issued in 2011; 26 issued amendments of certificates part B should by understood as 19 valid amendments issued in previous years + 7 amendments issued in 2011. 8 new certificates part B should be understood as 3 new certificates issued in 2011 for foreign railway undertakings + 5 valid certificate issued in previous years.

			Α	R	Р
E.2.3 Number of applications for Safety Certificates Part A submitted by Railway Undertakings in year 2011.	being	new certificates	3	0	0
	registered in the Czech Republic	updated/amended certificates	7	0	0
		renewed certificates	0	0	0
	being	new certificates	0	0	0
	registered in another	updated/amended certificates	0	0	0
	Member State	renewed certificates	0	0	0

#### RAIL AUTHORITY-CZECH REPUBLIC

			Α	R	Р
E.2.3 Number of applications for Safety Certificates Part B submitted by Railway Undertakings in year 2011.  being registered in the Czech Republic being registered in another Member State	registered in the Czech	new certificates	3	0	0
		updated/amended certificates	7	0	0
	Republic	Republic renewed certificates	0	0	0
	being	new certificates	3	0	0
	another	updated/amended certificates	0	0	0
		renewed certificates	0	0	0

Ref: DUCR-50099/12/Si

A = Accepted application, certificate is already issued

R = Rejected applications, no certificate was issued

P = Case is still pending, no certificate was issued so far

E.2.5. State, whose railway undertakings applied for Certificate Part B in the Czech Republic, while their Certificate Part A was issued in other state.

- 1. Slovak Republic 4 railway undertakings,
- 2. Poland 1 railway undertaking.
- 3. Germany 1 railway undertaking
- 4. Austria 2 railway undertaking

## E.3. Safety Authorizations according to Directive 2004/49/EC

	New	Update/amended	Renewed
E.3.1 Number of valid Safety Authorizations held by Infrastructure Managers in the year 2011 being registered in the Czech Republic	7	0	0

Note: 7 new safety authorizations should be understood as 6 valid authorization issued in previous years; 1 new safety authorization was issued in 2011.

		А	R	Р
E.3.2 Number of applications for Safety	New authorizations	1	0	0
Authorizations submitted by Infrastructure Managers in year 2011 being registered in	Update/amended authorizations	0	0	0
the Czech Republic	Renewed authorizations	0	0	0

A = Accepted application, authorization is already issued

R = Rejected applications, no authorization was issued

P = Case is still pending, no authorization was issued so far

## E.4. Procedural aspects - Safety Certificates part A

		New (days)	Update / amended (days)	Renewed (days)
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate <b>Part A</b> in year 2011 for Railway Undertakings	Being registered in the Czech Republic	120 (40)	141 (23)	-
	Being registered in another Member State	-	-	-

Ref: DUCR-50099/12/Si

## E.5. Procedural aspects – Safety Certificates part B

	New (days)	Update / amended (days)	Renewed (days)
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Certificate Part B in year 2011 for Railway Undertakings	123 (41)	141 (23)	-
	123 (41)	-	-

## E.6. Procedural aspects – Safety Authorizations

		New (days)	Update / amended (days)	Renewed (days)
Mean time after having received all necessary information between the receipt of an application and the final delivery of a Safety Authorization in year 2011 for Infrastructure Managers	being registered in the Czech Republic	30 (30)	-	-

Note: in the parenthesis is mentioned the mean time without time for discontinuing an action of the administrative procedure.