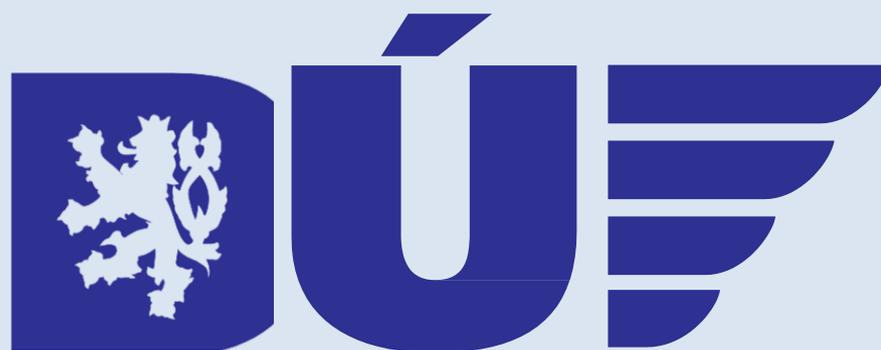


ANNUAL SAFETY REPORT 2017

Rail Authority



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Introduction by the Director of the Rail Authority

Dear colleagues, dear readers,

You hold in your hands our annual safety report for 2017. We publish this report every year so that you can follow the development of safety performance on railways.



The report clearly demonstrates that the Czech railways maintain a high level of safety. Despite the fact that infrastructure managers and rail transport operators seek to improve and innovate safety systems, an occasional incident can still happen. The biggest problems are caused by road vehicle drivers who ignore level crossing safety installations. As a result, unnecessary deaths, injuries and property damages occur. These could be avoided. To prevent the increasing number of such accidents, drivers must not only follow regulations that underline the importance of railroad crossing safety but also use their common sense – no-one should expect to win in an encounter

with a train weighing many tonnes.

I wish you trouble-free and safe journeys.

A handwritten signature in blue ink, which appears to be 'J. Kolář'.

Ing. Jiří Kolář, Ph.D.

Reference documents

Document title
Act No 266/1994 Coll. on Rail Systems, as amended
Act No 500/2004 Coll., the Code of Administrative Procedure, as amended
Act No 255/2012 Coll. on inspection (Inspection Code), as amended
Act No 320/2016 Coll. on the Transport Infrastructure Access Authority, as amended
Regulation No 376/2006 Coll. on the management system for rail operation safety and rail transport safety and on procedures in the event of incidents on railways, as amended
Regulation No 177/1995 Coll., stipulating construction and technical regulations of railways, as amended
Government Regulation No 133/2005 Coll. on technical requirements for operational and technical interoperability of the European Railway System, as amended
Directive 2004/49/EC of the European Parliament and the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (Railway Safety Directive)
Commission Directive 2009/149/EC of 27 November 2009 amending Directive 2004/49/EC of the European Parliament and of the Council as regards Common Safety Indicators and common methods to calculate accident costs
Commission Regulation (EU) No 1078/2012 of 16 November 2012 on a common safety method for monitoring to be applied by railway undertakings, infrastructure managers after receiving a safety certificate or safety authorisation and by entities in charge of maintenance
Commission Regulation (EU) No 445/2011 of 10 May 2011 on a system of certification of entities in charge of maintenance for freight wagons and amending Regulation (EC) No 653/2007
Commission Implementing Regulation (EU) No 402/2013 of 30 April 2013 on the common safety method for risk evaluation and assessment and repealing Regulation (EC) No 352/2009
Directive 2008/110/EC of the European Parliament and of the Council of 16 December 2008 amending Directive 2004/49/EC on safety on the Community's railways (Railway Safety Directive)
Regulation (EU) 2016/796 of the European Parliament and of the Council of 11 May 2016 on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004
Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union
Directive (EU) 2016/798 of the European Parliament and of the Council of 11 May 2016 on railway safety

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Abbreviations

ACRI	Association of the Czech Railway Industry
COTIF	The Convention concerning International Carriage by Rail
CSI	Common Safety Indicator
CSM	Common Safety Method
ČD	České dráhy, a.s. [Czech Railways]
CAI	Czech Accreditation Institute
CR	Czech Republic
ČSN	Czech national standard
RSIO	Rail Safety Inspection Office
DÚ	Rail Authority
ECM	Entities in Charge of Maintenance
EPSF	Etablissement Public de Sécurité Ferroviaire
ERAIL	European Railway Accident Information Links
ERTMS	European Rail Traffic Management System
ED	European directive
ETCS	European Train Control System
EU	European Union
FMEA	Failure mode and effects analysis
FTA	Fault tree analysis
GPK	Geometrical parameters of the line
GSM-R	Global System for Mobile Communication for Railway
GVD	Theoretical Graph of Train Running
JHMD	Jindřichohradecké místní dráhy
Incident	Incident
NSA	National Safety Authority
NSR	National Safety Regulation
ODV	Railway Vehicles Department
OPT	Operational Programme on Transport
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SFTI	State Fund for Transport Infrastructure
AB	Assessment body
ŠZDC	Railway Infrastructure Administration (state-owned company)
TENT-T	Trans-European Transport Networks
TRC	Transit railway corridor

UIC	Union Internationale des Chemins de fer / International Union of Railways
UTK	URZAD TRANSPORTU KOLEJOWEGO
STE	Specified technical equipment
STE/E	Specified technical equipment, electrical
Station	Railway station

INTRODUCTION

The Rail Authority was established by the Railways Act on 1 January, 1995. From the very beginning, the office was designed as an administrative authority that would exercise state administration in the area of railways. Its headquarters were established in Prague (its seat is in the northern part of the historical Fanta's building within Prague Central Station). In addition, regional offices were set up in Prague, Brno, Ostrava, Pilsen, Olomouc, Ústí nad Labem, Hradec Králové, Břeclav, Žatec and Letohrad. At present, there are only three regional departments, namely in Prague, Pilsen and Olomouc. Since its establishment, the Rail Authority has been responsible for railway, tram, trolleybus, cableway and special (underground) lines. It was also responsible for ski lifts up to 2005, but these were later removed from the Railway Act by an amendment. Starting with 2015, when the Civil Service Act came into force, the Rail Authority became one of many state institutions with the status of service office.

Since its establishment, there were several directors at the head of the Authority. Jaroslav Vrána was the first director of the Rail Authority, superseded by Tomáš Stone. After his dismissal, Miroslav Dvořák was temporarily entrusted with the management of the Authority. Pavel Kodým held the office of director of the Rail Authority for ten years and was replaced, based on the decision of Zdeněk Žák, minister of transport of that time, by Jiří Hanuš in 2013. Jiří Hanuš was at the head of the Authority for the period of 10 months; subsequently Jiří Kolář was appointed to the post, who defended its position within selection procedure and so he could be appointed repeatedly to the post of director of the Rail Authority by the State Secretary of the Ministry of Transport Tomáš Čoček, namely on 1 April 2016.

The Rail Authority prepared the annual report on its activities performed in 2017 that contains information on following themes:

- the development of railway safety, including a summary of common safety indicators ('CSIs') on the level of the Czech Republic;
- important changes in legislation and regulations concerning railway safety;
- development in the granting of safety certificates and safety approvals;
- results and experience relating to the supervision of infrastructure managers and railway undertakings, including the number and results of audits;
- derogations provided pursuant to section 15a;
- experience of railway undertakings and infrastructure managers in the implementation of applicable common safety methods (CSMs).

The report is based on Article 19 of Directive (EU) 2016/798 of the European Parliament and of the Council (EU), which was integrated into Czech legislation by transposition into Section 49e(6) of the Railways Act, and further specified by Section 6 of Regulation No 376/2006 Coll., on the management system for rail operation safety and rail transport safety, and on procedures in the event of railway incidents.

The purpose of this report is to provide carriers, infrastructure managers and other parties concerned with information about the development of railway safety during 2017.

The details provided in the Annual Report on the Rail Authority's activities are based on the individual annual safety reports of the carriers and infrastructure managers of national and regional railways, and on the experience of the Rail Authority and other entities. Infrastructure managers of national or regional railways (carriers licenced for national or regional railways) are obliged to submit

annual safety reports for previous calendar year to the railway administration authority by 30 June of each calendar year.

Out of total of 103 carriers and 8 national or regional infrastructure managers, almost all subjects submitted their annual safety reports by the deadline. During the year 2017, 3 carriers ceased to exist and other 3 were established.

The Annual Safety Report has been drawn up in Czech and English and published on the Rail Authority's website (www.ducr.cz).

1. GENERAL STATE OF SAFETY AND SAFETY STRATEGY

1.1. Main conclusions for the reporting year

In 2017, the Rail Authority fulfilled its plan to conduct preventive inspection activities to verify the proper functioning of safety management, and it will continue to conduct these activities with other infrastructure managers and carriers in 2018.

1.2. National safety strategies, programmes and initiatives

In order to maintain and improve railway safety, efforts focus on upgrading and developing railway infrastructure in the long term, in particular in the following areas:

- A. Upgrading transit railway corridors and other tracks, in particular tracks within the TEN-T network, rail junctions, and other tracks of the European rail network. Upgrades of transit railway corridors in the Czech Republic is the responsibility of the state-owned organisation SŽDC. Works were carried out aimed to speed up the passage through certain rail junctions and tracks included in the TEN-T system. In order to ensure the connectivity in the long term, interoperability of selected tracks is being ensured, in particular by the construction of a GSM-R digital radio system for the transit corridor I. The investments were made with the use of grants from SFTI, OPT and EU funds.
- B. GSM-R and ETCS systems are being implemented according to the ERTMS implementation plan in accordance with European standards. An ETCS has already been applied to several tracks and other track sections are under preparation.
- C. Investments made in repairs to railway infrastructure mainly included superstructure replacement, improved security of level crossings, repairs to platforms and station lighting, and bridge and culvert repairs.
- D. Further important investments were made within the development of suburban transport and integrated transport systems. Great attention is paid to the issue of level crossing security and passenger safety during train journeys and at stops and stations. Significant amounts from the Operational Programme Transport, SFTI and European funds have been invested in railway infrastructure to ensure the development of suburban transport and integrated transport systems.
- E. Due to the higher number of incidents on level crossings in the long term emerging from analyses of incidents, certain infrastructure managers, carriers and independent state institutions (such as the Rail Safety Inspection Office) are continuing preventive programs in 2017 to ensure safe conduct of the public at level crossings. Here we should point out that the higher number of accidents on level crossings also needs to be perceived as a consequence of the constantly increasing volume of road traffic. And although occurrences of accidents are nearly always the responsibility of road vehicle drivers, infrastructure managers are paying significant attention to this issue with the aim of reducing the number of level crossings and fitting level crossings with higher standards of security systems.

In the course of 2017 construction works were carried out not only on transit railway corridors but also on other tracks. For example:

1. Construction of transit railway corridor (TRC) III: the tunnelling of the second tube was completed in the Ejpvovice – Plzeň Doubravka section. So far there is no test operation.
2. Within the further part of the construction of TRC III, namely 'Beroun – Králův Dvůr, part I' section, test operation was gradually commenced during the year. In the course of the year,

- the test operation was commenced also at the construction site 'Pilsen junction, construction 2, reconstruction of the passenger station, including the Mikulášská Bridges'.
3. Within the complex reconstruction of the Pilsen junction a building permit was issued for the next part of the construction 'Pilsen junction, construction 3, rearrangement of the Domažlice track', test operation is not yet commenced here.
 4. The part of TRC III in the Stříbro – Planá u Mariánských Lázní section successfully passed final inspection.
 5. The part of TRC IV in Horusice – Ševětín section remains in the test operation.
 6. A building permit was issued for the project 'Modernisation of Sudoměřice – Votice line'. This deals with the complete modernisation of track within TEN-T system in the length of approx. 20 km with significant directional adjustment of the line (outside the current route) to a line speed of 160 km/h, and includes also two new tunnels. The construction will be commenced during 2018.
 7. Test operation was further prolonged on reconstructed lines, namely in Prague-Libeň – Prague-Běchovice section (up to 31 January 2019), Prague-Bubeneč – Prague-Holešovice (up to 31 December 2018), Sudoměřice u Tábora – Tábor (up to 31 December 2018), Prague-Běchovice – Úvaly (up to 30 June 2018) and on the construction of New Connection (up to 31 December 2018). After the reconstruction of the track in Benešov u Prahy – Votice section an approval was issued on 2 January 2017 and for the other two stages on 4 January 2017 (the construction was divided altogether into three stages). After the reconstruction of the track, an approval for Prague-Hostivař – Prague hl. n., stage I was issued on 22 December 2017. Further stage of this construction Prague Hostivař – Prague hl. n., stage II was not commenced even in 2017 and we are currently dealing with the appeal against the decision on the prolongation of the building permit.
 8. Within the construction 'Revitalisation of České Budějovice – Volary track' test operation was reintroduced due to the absence of noise control measures. Problems that were discovered within real-time noise measurements will be handled by the builder during 2018.
 9. The entire construction within the 'Removal of speed drop on the Karlovy Vary – Mariánské Lázně section' was put into test operation in 2017.
 10. As to more important constructions, building permits were issued for following constructions 'Modernisation of the railway station in Cheb', 'New railway stop Tábor-Měšice', 'Reconstruction of bridge at 35.579 km of Plzeň hl. n. – Žatec track' and 'Reconstruction of bridge at 48.927 km of Karlovy Vary d. n. – Mariánské Lázně track' which was also put in test operation during 2017.
 11. The Rail Authority participated increasingly in building permit procedures aimed to replenish the barriers to level crossings secured with warning lights.
 12. Not negligible part of the work of the Rail Authority is still formed by negotiations and authorisation of the means and scope of safety at railway crossings. In this matter it is necessary to highlight a qualitative shift in the view of the Railway Infrastructure Administration, the state organisation, as a dominant infrastructure manager as to the using of barriers. Therefore, there were practically no objections against the replacement of mechanical barriers with light crossing safety installations with barriers in 2017. The Rail Authority continues to find it unsafe to use half barriers and in that intent it attempts to influence managers. It must be said that the situation in this matter is also getting better.

1.3. Summary of major findings from inspection activities

State supervision and comprehensive supervision inspection activities conducted for carriers and infrastructure managers of national or regional railways did not find any major discrepancies with an immediate impact on railway operations and railway transport.

1.4. Main priorities for 2019

The general priority is mainly considered to be rail system safety itself, so that the transport of passengers and goods, particularly the carriage of dangerous goods, is safe, reliable and ecological. Therefore, the Rail Authority focuses on prevention and avoidance of sources of danger which could result in accidents and other incidents.

The railway package 4 and its directives must be transposed into Czech law by 25 December 2018 so that they come into force on 1 January 2019. The Directive will open the national rail passenger transport market. The Rail Authority continually makes preparations for these changes.

In 2018, the Rail Authority is continuing with intensive inspections of other infrastructure managers of national and regional railways and carriers, and in particular intends to:

- Continuously analyse the conclusions of state supervision and safety recommendations issued by the Rail Safety Inspection Office and the Rail Authority as a result of incident investigations in order to generalise risk events and areas, and subsequently to arrange for the relevant modifications to regulations, standards and technological procedures;
- Allow for a higher level of technical equipment within project preparation and approval for the reconstruction and upgrade of railway tracks, if financially feasible;
- Focus its own controlling activities in order to verify the prescribed inspections and revisions of drive and driven railway vehicles with selected railway undertakings.

2. DEVELOPMENTS IN SAFETY PERFORMANCE

2.1. Detailed analysis of the latest recorded trends

Pursuant to Commission Directive 2009/149/EC, transposed in the Czech Republic in Regulation No 376/2006 Coll., on the management system for rail operation safety and rail transport safety, and on procedures in the event of railway incidents, the following figures were recorded in 2017:

- number of accidents: 97;
- number of fatalities: 35;
- number of serious injuries: 58.

Table 1 presents most important indicators for the period under consideration.

Table 1 – General trend analysis

	Number of accidents:	Number of fatalities:	Number of serious injuries:
2009	113	26	92
2010	125	48	107
2011	99	29	74
2012	97	26	66
2013	91	24	52
2014	104	29	60
2015	94	29	53
2016	86	34	61
2017	97	35	58

Note: The data has been obtained from annual reports submitted by infrastructure managers of national and regional railways pursuant to Section 22(2)(e) of the Railway Act as of 30 June 2018. A detailed summary of accidents for 2017 is contained in Annex A that forms an integral part of this report.

The analysis shows that the number of accidents has stagnated in the long run. The number of accidents increased by 13% in 2017 when compared with the previous year. As per the definitions specified in the Commission Directive 2009/149/EC, 35 persons were killed (excluding suicides) and 58 persons were seriously injured.

For the sake of completeness, details of statistics of the Rail Safety Inspection Office are provided below. There were 4 648 incidents on all types of railways in the Czech Republic in 2017. This number expresses the quantity of all incidents, and not only serious accidents as defined in Commission Directive 2009/149/EC.

171 collisions occurred on level crossings. Collisions at level crossings with a person illegally entering the perimeter of the track significantly restrict and interrupt the regularity of railway transport. Mostly the accidents on level crossings are caused by road users failing to respect or knowingly violating the provisions of Act No 361/2000 Coll. on road transport and the Railway Act.

2.2. Results of safety recommendations

Table 2 lists the safety recommendations received from the national inspection authority (Rail Safety Inspection Office), including the information on the implementation status and a description of the measures taken. Implementation of safety regulations is stipulated in Section 13(1) of Directive No 376/2006 Coll. on the management system for rail operation safety and rail transport safety, and on procedures in the event of incidents on railways. Amendment No 319/2016 Coll. (the Railway

Act) came to force on 1 April 2017 that changes the Section 53e. New regulation of the final report on the investigation. A major change has been made to safety recommendations as the Rail Authority, on the basis of these recommendations, should take appropriate action and inform the Railway Safety Inspection Office within 12 months. (The Rail Safety Inspection Office shall prepare a final report on the results of the investigation in 12 months from the day when the incident occurred at the latest. If this is appropriate for the sake of incident prevention, the final report also contains a safety recommendation for the Rail Authority. The Rail Authority utilises safety recommendations to take appropriate measures. Next, the Rail Authority shall notify the Rail Safety Inspection Office within 12 months from the date of publication of the final report containing the safety recommendations addressed to them, what measures they have taken in connection with this recommendation.) Amendment No 77/2017 Coll. came to force on 1 April 2017 (Directive No 376/1995 Coll. on the management system for rail operation safety and rail transport safety, and on procedures in the event of incidents on railways) that changes 'The particulars of the report on the commencement of an incident investigation' and '(The particulars of) final report on the results of incident investigation'.

<i>1 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>5 January 2017 Golčův Jeníkov-město, stop Collision with a passenger car on level crossing P3706 during shunting between operating control points <i>Safety recommendations:</i> To the Railway Infrastructure Administration: To order an extraordinary training ending with a special test 'Specialised test for train control personnel' for all personnel at a train control position performing operations during track closures, including externally hired personnel and contractors' employees, by 30 June 2017 at the latest. To the Rail Authority: To adopt its own measures leading to the implementation of the above-mentioned safety recommendation by other infrastructure managers of railways v in the Czech Republic. To the Ministry of Transport: To adopt its own measure so as to ensure that when warning lights are partially deactivated on multiple-track lines, the road users are always informed by a road signalling (e.g. Traffic sign No. A22 'Other danger') about increased risk and construction work performed on and around the railway crossing. Inspection by public authorities should be performed randomly during the operation of the railway vehicle drivers, focused on the consumption of alcohol, resp. addictive substances.</p>	<p>The Rail Authority sent a letter to all infrastructure managers of national and regional railways (Ref. No. DUCR-2833/17/Wo of 12 January 2017), Feedback is to be given by 31 August 2017</p>	<p>Implemented</p>

<i>2 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>5 January 2017 Řehlovice, station</p> <p>Unauthorised movement of train Nex 163602 past signal device L2 in stop position and subsequent collision with train Pn 59040</p> <p><i>Safety recommendations:</i></p> <p>To the Railway Infrastructure Administration: By means of evaluating records of ReDat recording equipment to create conditions allowing all carriers operating railway transport on the tracks operated by Railway Infrastructure Administration, state organisation, to perform more effective and comprehensive control activities of engine drivers aimed at controlling the execution of the radio link test in accordance with the internal regulation of SŽDC (ČD) Z11. The misconducts detected during the inspection of the radio link test should then be discussed with the relevant carriers and consistently required compliance by the carrier's employees with binding regulations of infrastructure manager, in accordance with the contract on the operation of railway transport. To create technological procedures for the case when dispatcher detects the loss of radio link with the engine driver.</p> <p>To UNIPETROL DOPRAVA, s. r. o.: To revise the existing control system so that the control activity of the engine drivers concerning the execution of the radio link test within the meaning of the internal regulation of SŽDC (ČD) Z11 is permanently intensified. To introduce the test of functionality of radio link via allocated mobile phone prior to each train journey.</p> <p>To the Rail Authority: To adopt its own measure aimed at ensuring the implementation of the above-mentioned safety recommendations by all infrastructure managers and carriers in Czech Republic.</p>	<p>The Rail Authority sent a letter to all infrastructure managers and operators of rail transport on national and regional railways (Ref. No. DUCR-2923/17/Wo of 13 January 2017), Implementation of own measures within the meaning of Section 22(1)(a) and Section 34h(3)(a) of the Railway Act so that the reasons leading to a similar extraordinary event are minimised (for all infrastructure managers and operators of rail transport)</p>	<p>Implemented</p>
<i>3 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>1 February 2017 Between Dobronín station and Jihlava station</p> <p>Derailment of two towed railway vehicles during the journey of train Pn 62800.</p>	<p>Dealt by ODV Director within his work activities</p>	<p>Addressed by current regulations</p>

<p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>To adopt its own measures towards the involved entities. A new inspection of bearings should be always conducted after a railway vehicle shut-down exceeding 6 months. The life cycle of identified axle anti-friction bearings is limited to a maximum of 40 years and non-identified bearings are directly discarded and not used any more. To discuss with vehicle owners, possible outfitting of towed railway vehicles mainly designated for the transport of passengers and dangerous goods with a pneumatic derailment detector. In cooperation with the Ministry of Transport of the Czech Republic to adopt an effective measure in relation to the National Vehicle Register so that the valid registration is a condition for the operation of railway vehicles on the Czech railway network so that the owners and holders of rail freight wagons update as soon as possible and add all necessary data to the national register of railway vehicles.</p>		
<p>4 – Safety recommendations</p>	<p>Safety measures</p>	<p>Implementation status</p>
<p>9 February 2017</p> <p>Between Olomouc hl. n. station and Štěpánov station</p> <p>Fall of a child passenger out of the entrance door of a towed railway vehicle during the journey of train R 884.</p> <p>Safety recommendations:</p> <p>To České dráhy, a. s.:</p> <p>To modify uniform technological procedures so that the crews of trains comprising two or more coupled towed railway vehicles equipped with central entrance door locking are always obliged, as a matter of priority, to use the central lock to close/fully seal the entrance doors before checking their locking status and giving the 'Ready to depart' or 'Departure approved' signal. To provide training for employees – to train crew members operating central entrance door locking devices in all of its functions. On currently used towed railway vehicles with the Y-type vehicle body (according to standard UIC 567-1, i.e. also with the YB70 type) with outer hinged double-wing folding entrance doors, to install, refurbish or modify an central entrance door locking device controlled by a train crew member, so that once the device has been used, the doors cannot be manipulated from the interior of the towed railway vehicle and the entrance doors close/fully seal until the train departs and the doors are secured against opening during travel by a technical device, i.e. it is impossible to reopen, slightly open, or slightly close them, etc., unless subsequent opening of entrance doors is not enabled/provided by on-</p>	<p>Resolved by the reconstruction of Y-type vehicle body – door alert</p>	<p>Implemented</p>

<p>board accompanying staff (in the event of imminent danger, in order to allow for further get on/out of passengers etc.). To fit, currently used towed railway vehicles with the Y-type vehicle body (according to standard UIC 567-1, i.e. also with the YB70 type) with outer hinged double-wing folding entrance doors, with a technical device detecting and signalling non-closed/ajar entrance doors. Until all of the above-mentioned safety recommendations have been implemented, to modify uniform technological procedures, in particular train departure procedures, in which the carrier ensures manning of the train with professionally qualified employees – a train crew, so that when checking that entrance doors of a train comprising towed railway vehicles with a Y-type vehicle body (according to standard UIC 567-1, i.e. including the YB70 type) are closed/fully sealed.</p> <p>To the Rail Authority:</p> <p>To adopt its own measure leading to the implementation of the above-mentioned safety recommendations by other carriers using towed railway vehicles with similar entrance door designs for transport operations or, as the case may be, to adopt an adequate measure of its own as a national safety body under its international activities.</p>		
<p>5 – Safety recommendations</p>	<p><i>Safety measures</i></p>	<p><i>Implementation status</i></p>
<p>16 March 2017</p> <p>Between Strážnice station and Veselí nad Moravou station</p> <p>Collision of train Os 2710 with a tractor with trailer</p> <p><i>Safety recommendations:</i></p> <p>To the Railway Infrastructure Administration:</p> <p>In connection with the already issued safety recommendations, the fitting of level crossing P8139, currently secured only with warning lights, with barriers which, thanks to the visual obstruction, will reduce the probability of a driver entering the level crossing when not respecting the warning lights at the level crossing. Given the fact that most collisions on level crossings with most severe consequences occur on level crossings secured with warning lights without barriers, in line with the wording of the previous safety recommendations of the Rail Safety Inspection Office, it is recommended to continue in the increasing security at level crossings in order to ensure a maximum level of safety of rail transport operations and road users, so that only level-crossing warning light equipment supplemented with whole barriers is designed and installed for two-way roads with opposing folding half barriers and a gradual</p>		

<p>(sequential) folding barrier system when upgrading or reconstructing tracks and level crossings, not only those included in the European rail system.</p> <p>To the Rail Authority:</p> <p>To adopt its own measure to ensure that the above-mentioned safety recommendations for the infrastructure manager are also implemented by other infrastructure managers in the Czech Republic, or when discussing a request for a change in level crossing security and making a decision in the given matter.</p> <p>To the Ministry of Transport:</p> <p>To incorporate the above-mentioned safety recommendation for the infrastructure manager into the Railway Act.</p>		
6 – Safety recommendations	Safety measures	Implementation status
<p>26 May 2017</p> <p>Between operating control points in Včelnička and Chválkov</p> <p>Collision of train MOs 203 with train MOs 204 on regional railway</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <ol style="list-style-type: none"> 1. to verify with all infrastructure managers in the territory of the Czech Republic that use simplified rail transport management whether the rail transport control procedures used by them are in accordance with Section 19 of regulation No 173/1995 Coll., 2. to recommended the concerned carriers and managers of these railways to change GVD including all related GVD tools in that sense that in all operating control points with at least one regular train crossing scheduled according to CGV, all trains are ordered to stop and stand (so that the train stopping ‘on request’ is not possible at these operating control points), 3. to recommended the concerned carriers and managers of these railways to install, within modernisation, such technical (safety) devices on tracks and on drive railway vehicles that would exclude the possibility of failure of a human factor in the organisation of railway transport or driving of railway vehicles that could lead to incident occurrence. 	<p>Measures by JHMD:</p> <ol style="list-style-type: none"> 1) dispatcher in Jindřichův Hradec operating control point, 2) extraordinary supervision of DU on D3 lines <p>(section 19 of reg. 173/1995 Coll.)</p>	<p>Implemented</p>

<i>7 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>27 April 2017 Kolín station, marshalling yard Derailment of six towed railway vehicles during the journey of train Pn 360542 on national railway</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>To modify the existing system of internal control of the infrastructure managers so as to fully ensure the observance of the technological procedures of these managers for detecting, recording and removing defects on the railway superstructure (exceeding operational deviations of GPK, condition of the rail supports and fasteners, etc.), resp. that deficiencies in the performance of the work obligations according to the manager's technological procedures at all levels of control are detected in time and effective corrective measures are taken.</p>	<p>In general, to detect defects in a timely manner.</p>	<p>Addressed by current set of regulations</p>
<i>8 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>11 July 2017 District of Vejpřnice station Collision of regional passenger train No 7403 with a car on level crossing P599</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>Take internal measures so as to ensure the implementation of previous safety recommendations issued by the Rail Safety Inspection Office in order to increase the safety of level crossings, since level crossings with lights and without barriers are the sites of most collisions between trains and road vehicles with worst consequences. The level crossing P599, which only has only light level crossing safety installations and no barriers, has been a site of train/road vehicle collisions already in 2013 and 2015. The Rail Safety Inspection Office therefore recommends the Rail Authority to open negotiations with the infrastructure manager in order to change the safety systems of this particular crossing, i.e. the addition of barriers with a view of increasing the safety of the level crossing.</p>	<p>The Rail Authority sent a letter (Ref. No. DUCR-15375/18/Kx)</p>	<p>Railway crossings are modified within investment activities of their respective managers</p>

<i>9 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>4 July 2017 Velký Šenov, operating control point D3 Derailment of train Os 5452 on regional railway</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>To take internal measures aimed to securing and approving of electrical heating of changes of points designed only for the entire point part of the point switch.</p>	<p>In general, assessed as a part of the approval of the activities by the infrastructure manager. (Electrical heating of point switches throughout the route).</p>	<p>Addressed by current set of regulations</p>
<i>10 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>24 August 2017 Rudoltice v Čechách, station Unauthorised movement of train Lv 56255 beyond signal device in stop position, entering the route set up for the train Nex 43204</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>To make use of its rights under the applicable law and ensure that concerned carrier, e.g. Rail system s.r.o: removes detected error in the existing security system regarding the absence of procedures and templates for the documenting of safety information and the failure to establish the procedure for monitoring the conveying of most important safety information according to Annex 1 of Reg. No 376/2006 Coll.; within the process of renewal of the ‘Safety Certificate’ in 2017, to approve the safety management system, drafted strictly according to the requirements for its content according to Annex No. 1 of reg. No 376/2006 Coll. and in line with the methodology set out at the website of Rail Authority; to make inspection aimed at the recording of the individual tasks within operational treatment ‘R0’ of drive railway vehicles in a demonstrable and established procedure so that compliance with the provisions of chapter 4.5 ‘Control and corrective actions’ of the safety management system can be demonstrated.</p>	<p>Addressed within the current set of regulations</p>	<p>New certificates after 1 July 2017 (procedure pursuant to the Annex 1 of Reg. No 376/2006 Coll.)</p>
<i>11 – Safety recommendations</i>	<i>Safety measures</i>	<i>Implementation status</i>
<p>24 August 2017 Kralupy nad Vltavou, station Unauthorised movement of train Nex 41363 beyond main signal device Sc7 displaying the ‘Stop’ signal, followed by entering the route set up for train Os 9770</p>	<p>The rail Authority did not recommend the safety recommendation for realisation</p>	<p>Addressed by current set of regulations</p>

<p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>In cooperation with Railway Infrastructure Administration (state-owned company), infrastructure manager, to consider, within reconstruction, the modernisation or repairs of infrastructure in Kralupy nad Vltavou station, the possibility to change the type of installed main (route-indicating) signal device Sc7, namely from the dwarf one to e.g. mast one with shortened mast length, taking into account local spatial conditions (e.g. the configuration of traction line).</p>		
<p>12 – Safety recommendations</p>	<p>Safety measures</p>	<p>Implementation status</p>
<p>11 September 2017 Havlíčkův Brod, station Derailment of railway vehicles during the journey of train Nex 48302 on national railway</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>To adopt measured addressed to railway infrastructure managers – during 2018 at the latest, to extend the training scope for regular staff dealing with control activities, repairs and removal of infrastructure defects, on the matter of defining an unambiguous interface at the locations of connection of controlling and monitoring elements of safety devices to moving parts of point switches, considering the measures taken to ensure traffic safety at the time of damage to the infrastructure after an incident, at the time of the operational malfunction and in failure conditions; on repairs, inspection and measurements of the point switches, considering the measures taken to ensure traffic safety at the time of damage to their fixed and moving parts after incidents and during operational failures.</p>	<p>The Rail Authority sent a letter to all infrastructure managers of national and regional railways (Ref. No. DUCR-58175/17/Wo), of 10 October 2017</p>	<p>Infrastructure managers should extend the scope of regular trainings for their staff</p>
<p>13 – Safety recommendations</p>	<p>Safety measures</p>	<p>Implementation status</p>
<p>25 September 2017 Prague hl. n., station Derailment of train Sv 560 on national railway</p> <p><i>Safety recommendations:</i></p> <p>To the Rail Authority:</p> <p>To adopt its own measure addressed to infrastructure managers so as to: develop technological procedures for examination, the assessment of the severity of the defects and the way of repairing the cracks in the welds of shoes and base plates; introduce an obligation for the</p>	<p>The Rail Authority sent a letter to infrastructure managers of national and regional railways (Ref. No. DUCR-60968/17/Wo of 24 October 2017), Welding technology and welding records</p>	<p>Implemented</p>

<p>infrastructure manager to record all welding works on all parts of the railway superstructure.</p>		
<p>14 – Safety recommendations</p>	<p>Safety measures</p>	<p>Implementation status</p>
<p>9 October 2017 Between Rudoltice v Čechách and Krasíkov stations Collision of train Ex 1007 with a truck stuck on railway level crossing P6519 <i>Safety recommendations:</i> To the Rail Authority: To adopt measures that will ensure in the shortest possible time that: for all level crossings on roads and local roads in the Czech Republic, which have undergone reconstruction during the period of validity of Section 37(2) of Act No 13/1997 Coll. it will be verified whether the actual design of the crossing structure ensures that the clear width is at least 5 m; the railway crossing P6519 and all other crossings that underwent reconstruction during the period of validity of Section 37(2) of Act No 13/1997 Coll. and with insufficient clear width detected, will be brought into line with these stipulations without an undue delay; in cooperation with the relevant road administration authorities and the infrastructure manager, the road marking (V4 – guiding lines) should be used on both directions before and behind the railway crossing P6519 and all the other crossings, where an insufficient clear width is detected within the inspection, wherever it is possible to realise this taking into account local conditions, or other appropriate measures will be taken so as to increase safety at and around these railway crossings and prevent the occurrence of incidents, such as by defining the priority of passing vehicles or by indicating the road narrowing with relevant traffic signs. To the Office for Standardisation, Metrology and Testing: To modify the ČSN 73 6380, Railway level crossings and pedestrian crossings, so that it complies with ČSN 73 6101, Design of highways and motorways, and with ČSN 73 6110 Design of local roads, in particular with regard to the arrangement of directional and elevation conditions in the crossing area and in the section of road adjacent to the crossing; to incorporate in ČSN 73 6380, Railway level crossings and pedestrian crossings, the obligation to mark on railways crossings, where feasible considering local conditions, the boundaries of traffic lines (guiding stripes) in the form of road marking; to define, in ČSN 73 6380, Railway level crossings and pedestrian crossings, the requirement to ensure a safety</p>	<p>Extraordinary state supervision operations performed. Inspection of widths of all reconstructed crossings.</p>	<p>Realised within ongoing state supervision and addressed in protocols</p>

<p>reserve (safety distance) of traffic lanes from the edge of the crossing structure at such railway crossings, where it is feasible considering local conditions. The safety reserve would, over the length of the crossing, perform a function of a paved shoulder not primarily intended for vehicle driving; to define/determine in ČSN 73 6380, Railway level crossings and pedestrian crossings, the relationship between the width of the crossing and the width of the adjacent road so as to avoid the designs where the crossing structure is considerably wider than the adjacent road and there is a danger that a vehicle could depart from significantly narrower road just behind the crossing; to include in ČSN 73 6380, Railway level crossings and pedestrian crossings, the obligation to define the priority of passing vehicles by the respective traffic signs in cases where crossing width does not correspond to the minimum required width corresponding to the two traffic lanes including the safety reserve; to achieve, by appropriate modification of ČSN 73 6380, that required clear width of the road at the crossing is at least 6m or, alternatively, to maintain the minimum width of traffic lane at the crossing according to ČSN 73 6101 and ČSN 73 6110. If the requirement for minimum width of 5 m is retained, to define the obligation to install the traffic sign indicating a narrower width at the crossing and at the same time to incorporate in the standard the requirement to maintain the clear width of the road on the crossing continuously over the entire length of the crossing.</p> <p>To the Ministry of Transport CR:</p> <p>To deepen the public awareness of the location of numbers within the uniform identification of railway crossings at railway crossings, their purpose and way of use.</p>		
<p>15 – Safety recommendations</p>	<p>Safety measures</p>	<p>Implementation status</p>
<p>3 November 2017 Between Hostomice pod Brdy, operating control point D3, and Lochovice station Collision of train Os 27714 with a passenger car on railway level crossing P558 <i>Safety recommendations:</i> To the Rail Authority: Considering the fact that collisions between trains and road vehicles already occurred on the railway crossing P558 in 2010 and 2016, as well as considering the fact that the railway crossing P558 is a double-track one, the Rail Safety Inspection Office suggests that the Railway Authority opens negotiations with the infrastructure</p>	<p>The Rail Authority sent a letter (Ref. No. DUCR-15397/18/Rb), Addition of barriers to existing level crossing safety installations with lights</p>	<p>Realised by SŽDC within their investment plans</p>

<p>manager on change – raising safety level of this specific crossing, i.e. addition of barriers to existing level crossing safety installations, which, as an optical and physical barrier, will reduce the probability of the driver entering the railway crossing when not respecting the warning signal of the level crossing safety installations. Following the safety recommendations on safety at rail crossings previously issued by the Rail Safety Inspection Office (Ref. No 877/2012/DI and subsequent recommendations of the same or similar wording), to adopt internal measures aimed to ensure their implementation in order to increase the safety at railway level crossings and to prevent incidents, since level railways crossings with lights and without barriers are the sites of most collisions between trains and road vehicles with worst consequences.</p>		
<p>16 – Safety recommendations</p>	<p>Safety measures</p>	<p>Implementation status</p>
<p>10 November 2017 In Klatovy station, on regional railway Collision of train Os 17505 with a passenger car on railway level crossing P8385 <i>Safety recommendations:</i> To the Rail Authority: Considering the fact that Rail Safety Inspection Office registers for the concerned line (Horažďovice předměstí – Domažlice), namely in Běšiny – Klatovy section, further two similar incidents, caused by car entering the railway crossing despite of light warning and acoustic warning of level crossing safety installations without barriers, in connection with the safety recommendations already issued by Rail Safety Inspection office, and also the fact that the subject railway crossing is located in rural area of the city with high intensity of road transport, to open negotiations with the infrastructure manager on change – raising safety level of this specific crossing and other frequently used railway crossings, i.e. the addition of barriers to existing level crossing safety installations, which, as an optical and physical barrier, will reduce the probability of the driver entering the railway crossing when not respecting the warning signal of the level crossing safety installations.</p>	<p>The Rail Authority sent a letter (Ref. No. DUCR-15375/18/Kx), Addition of barriers to existing level crossing safety installations with lights</p>	<p>Realised by SŽDC within their investment plans</p>

Table 2 – implementation of safety recommendations in 2017

3. SUPERVISION

3.1. Strategy and plan

In 2017, assigned Rail Authority personnel performed state supervision in railway matters with a focus on the performance of obligations of carriers, infrastructure managers and railway owners in line with applicable legislation.

3.1.1. Sources of information and main inputs used to establish the strategy and plan for supervision.

Inspections are considered by the Rail Authority to be preventive measures with a major impact on the safety of rail operations and railway transport with the aim of ensuring a condition stipulated by legislation or, as the case may be, confirming the correctness of the supervised entity's actions.

The Rail Authority methodically proceeds pursuant the Inspection Code. Inspections are conducted in the form of announced and unannounced state supervision. Any discrepancies discovered are stated in the respective reports on the performance of state supervision. Dates for their rectification are also determined along with a statement of any violations of laws, regulations and directives. The supervised entity has the opportunity to explain the causes of violations of correct procedures and to propose measures in writing for the attention of the Rail Authority. In cases where multiple discrepancies are identified during an inspection, the Rail Authority shall then perform subsequent state supervision, the purpose of which is to check the actual elimination of the discrepancies identified. Besides ordinary state supervision, the Rail Authority also performs a supervision of carriers and national and regional infrastructure managers in the form of comprehensive state supervision in order to examine all activities of a supervised entity. Several departments of the operational and technical section usually participate in comprehensive state supervision, where such supervision can be considered multiple state acts of supervision due to its complexity and intensity.

Specific inspection activities

In 2017, inspections were conducted by both operational and technical sections which comprise several departments and offices based on their work focus. Also, specific inspections made by individual departments and offices differ.

Assigned personnel of the Building Section performed 521 state supervision operations in 2017.

State supervision in railway matters was focused on:

- rail system maintenance and repairs in the extent required for ensuring its operability (Section 20(1) of the Railway Act),
- periodical inspections and measurements of rail systems in line with the provisions of Appendix No 1 to Regulation No 177/1995 Coll. issuing the rail system building and technical regulations ('Regulation')
- rail system operation inconsistent with the rail traffic operation rules (Section 35(1) of the Act on Rail systems),
- issue of an internal regulation on infrastructure management and on professional competence and knowledge of infrastructure managers (Section 22(1)(b) of the Railway Act), verifying whether, in the course of the rail system operations and maintenance, structural and operational subsystems and individual parts thereof meet the basic requirements regarding structural and operational conditions, as well as the technical specifications for interoperability (Section 49e of the Act on Rail System).

Assigned personnel of the Operational and Technical Section performed 365 state supervision operations in 2017 including comprehensive state supervision operations.

- Also in 2017, the Safety and Licensing Department performed state supervision in its areas of competence, as in previous years. The Office for Passenger Safety and Rights concentrated on the inspections of rail transport operators on national or regional railways, certification of carriers, safety systems, compliance with the internal regulations of individual operators, including their control activities. This office (department), in cooperation with other departments of the Operational and Technical Section, performed comprehensive state supervision operations examining the compliance with the responsibilities of carriers and functioning of safety systems, namely at major undertakings. There were 11 inspections of this kind realised in 2017. Further, the Office for Passenger Safety and Rights performed state supervision operations with a similar focus as the comprehensive supervision of smaller transport and construction companies. These inspections were realised by internal workforce. The office also carried out several inspections of compliance with the safety recommendation issued by the Rail Safety Inspection Office on tracks that are controlled in a simplified manner under D3 regulations, basically of all infrastructure managers of regional railways. In some cases, state supervision has revealed shortcomings consisting in the failure to notify changes of regulations or to make changes to regulations following the changes in legislation, inadequate control activities, late submission of documents related to health or professional competence of employees. The Office for Official Permits and Licences focused its control activities primarily on the fulfilment of the obligations of managers of infrastructure – branch line, of carriers realising the rail transport on branch lines and of the owners of branch lines. Imperfections and deficiencies were mainly found in the areas of track designation, technical feasibility, performing regular inspections and measurements according to the regulation, errors in regulations and failure to notify changes in the information given in official permit and licence.
- When compared with previous years, the Rolling Stock and ECM Department performed almost double the number of state supervision operations in railway matters in 2017. Very good cooperation with the Selected Non-Electrical Technical Equipment Department has manifested itself in jointly lead state supervision operations and inspections. The purpose and aim of these jointly performed state supervision operations and inspections are to maintain and increase the professional competence of the employees of the two departments, as by the co-operation of employees with different professional focus of the two departments within the inspections, the level/scope of control and state supervision operations and inspections is substantially raised/extended. The positive impact of these joint inspections and state supervision operations is particularly evident not only in the audited entities, but also in the transport of dangerous goods and cableways. Regarding the fact that this method of joint inspections and state supervision operations turned out to be highly efficient, it will also be reflected in inspections and state supervision operations in next years. Unfortunately, most discrepancies were found again in the segment of railway vehicles and their operation in unsatisfactory technical condition not corresponding to the approved vehicle type. We shall not omit the significant number of identified inconsistencies without a direct impact on the failure to comply with safe performance of rail transport, consisting in keeping the railway vehicle documentation, whether on the repairs of vehicles already completed or approved changes, incomplete or completely missing records in certificates of competence, not

submitted records of completed technical inspections, etc., as well as in the dangerous goods transport category when the inspections were focused mainly on performance of the obligation of the railway undertaking and participant of the dangerous goods transport in line with the Regulations for International Carriage of Dangerous Goods by Rail (RID) and Regulations for Selected Technical Equipment. During the state supervision operations, attention was mainly paid to the performance of requirements stipulated for tanker railway vehicles and to the validity of certificates of competence of the tanks of these railway vehicles. Attention was also paid to documents on the training of personnel participating in dangerous goods transport, validity of the certificate of a safety consultant for dangerous goods transport, concluded contracts with safety consultants, the latest annual reports on activities related to dangerous goods transport, safety (emergency) plans, as well as the reports on accidents and incidents related to dangerous goods transport. In the field of ECM – besides the state supervision operations, also verifications were performed of the entities as to their ongoing compliance with the criteria defined in Annex III pursuant to Commission Regulation (EU) No 445/2011. Some deficiencies were found also of these entities and administrative proceedings related to them are still under way.

- The Selected Non-Electrical Technical Equipment department performed state supervision operations in the rail system's affairs at 47 supervised entities. It was nearly the same number as in 2016. Of this number of state supervision operations in the rail system's affairs, 23 were performed in entities specialised in pressure and gas equipment, of which 6 were transport undertakings and 17 were infrastructure managers and carriers. In the area of lifting and transporting equipment, state supervision operations were performed at 24 entities, of which 8 at cableway operators and 5 at ski-lift operators. Remaining state supervision operations were performed at infrastructure managers, operators of rail transport and transport company. In cooperation with the Rolling Stock department, the supervision was performed pursuant to the special regulation over selected products (Section 18(1)(b) of Act No 22/1997 Coll.) and other products (Section 7(1) of Act No 102/2001 Coll.) designated for infrastructure management and rail transport operation, being a part of the infrastructure or railway vehicles, over railway vehicles, selected technical equipment and over structural and operational subsystems in rail systems, included in the European rail system pursuant to the provisions of Section 55(2) of the Railway Act for 1 entity – manufacturer, resp. distributor. Altogether 3 supervision operations were performed. Supervision was performed over sub-systems of cableway and safety elements of cableways in line with the provisions of Section 4(3) of Government Regulation No 70/2002 Coll., stipulating technical requirements for passenger transport equipment.
- The RID department carried out 53 inspections with a focus on on-site inspections, namely of the fulfilling the obligations of carriers under chapter 1.4 of the RID, as well as the obligations of senders, recipients, railway infrastructure managers and other participants within the meaning of chapter 1.4 of the RID. There were also inspections in railway yards of national infrastructure manager in the districts of railway stations in Břeclav, Česká Třebová, Kolín, Prague-Libeň, Olomouc hl. n., Děčín hl. n. and Děčín-východ. Some inspections were also conducted in cooperation with the ECM office of the Railway Vehicles Department. During the inspections, attention was mainly paid to performance of the requirements stipulated for tanker railway vehicles and to the validity of certificates of competence of the tanks of these railway vehicles. Attention was also paid to documents on the training of personnel

participating in dangerous goods transport, validity of the certificate of a safety consultant for dangerous goods transport, concluded contracts with safety consultants, the latest annual reports on activities related to dangerous goods transport, safety (emergency) plans, as well as the reports on accidents and incidents related to dangerous goods transport.

- The **Selected Electrical Technical Equipment Department** ('STE-E') performed state supervision with the focus on all types of electrical equipment specified in Section 1(4) of Regulation No 100/1995 Coll., stipulating conditions for the operation, design and production of selected technical equipment and specification thereof (Regulations for Selected Technical Equipment), as amended ('Regulation No 100/1995 Coll.'). Performance of state supervision in rail system affairs was focused mainly on compliance with Section 22 and Section 47 of the Act on Rail systems, i.e., the operation of selected electrical technical equipment with a valid certificate of competence corresponding to the approved competence, compliance with the provisions of professional electrical engineering competence pursuant to Appendix No 4 of Regulation No 100/1995 Coll. As a part of the state supervision in rail system affairs, inspections of legal entities performing technical inspections and tests of selected electrical technical equipment were also performed according to the 'Conditions for Auditing Legal Entities', published in Transport Bulletin No 12/06, ref.: 36/2006-130--SPR/2 of 18 May 2006.
- The Independent Personnel Competence Department performed 33 state supervision operations in 2017 and participated in 6 comprehensive state supervision operations at carries. So, the number of state supervision operations increased as compared to 2016, when 23 operations were performed. The state supervision operations were performed with the focus on professional and health qualifications of persons driving railway vehicles on national, regional rail systems and branch lines. Attention was paid to the documents for issue of the engine driver's certificate, completed training, professional qualification tests, register of issued driver's certificates and records of completed inspections pursuant to Section 46q of the Railway Act. Of the total number of 33 state supervision operations, 24 events were announced in advance and 9 were not announced. No serious imperfections were found during the state supervision operations.

3.1.2. Continuous upgrading of the supervision plan

Documents for performing state supervision are prepared based on suggestions from third parties, outputs of the Rail Safety Inspection Office or the findings of the Rail Authority. The Rail Authority has increased the number of state supervision operations in all sections of its competences for 2017 and in the forecast period of 2018.

3.2. Coordination and cooperation

Agreements on the coordination of inspection activities were not entered into with national safety authorities of other EU Member States in 2017. The Rail Authority cooperates with the Rail Safety Inspection Office as per Section 8(2) of Act No 500/2004 Coll., the Code of Administrative Procedure.

3.3. Competence

Rail Authority employees participated in induction training sessions for newly hired employees in 2017, as well as advanced job training of employees focused on legislation of the Czech Republic and European Union to deepen their knowledge of this area. Training in railway transport legislation is expected to continue in the next year. Employees who perform state supervision are required to be

medically fit in line with Regulation No 101/1995 Coll. on medical fitness of persons involved in railway operation and railway transport.

3.4. Feedback

The rectification of discrepancies has always been reported to the Rail Authority in writing and corrective measures have been described. The Rail Authority checked the rectification of discrepancies according to their severity and verified the correctness of measures taken. Infrastructure managers and operators did not file any complaints against the Rail Authority's performance. We should emphasise that the majority of discrepancies and defects found did not directly endanger railway operations and railway transport.

4. GRANTING OF CERTIFICATES AND APPROVALS

The Rail Authority prepared a guideline for granting and approving a carrier's certificate and an infrastructure manager's safety certificate as per Article 12(2) of Directive 2004/49/EC of the European Parliament and of the Council on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (the Railway Safety Directive), as amended ('Directive 2004/49/EC'), Commission Regulation (EU) No 1158/2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates ('Regulation No 1158/2010') and Commission Regulation (EU) No 1169/2010 on a common safety method for assessing conformity with the requirements for obtaining a railway safety authorisation ('Regulation No 1169/2010'), aiming to make it more convenient for applicants – infrastructure managers and railway undertakings from the Czech Republic and other EU Member States to apply for:

4.1. A carrier's certificate issued to railway undertakings based in the Czech Republic

5 new certificates and 16 renewed carrier's certificates (parts A and B) were issued in 2017 pursuant to Section 34(h) of the Railway Act.

5 amendments to existing carrier's certificates were issued in the course of 2017. The amendments resulted from the changes in railway undertakings' organisations or changes in company names.

In 2017, no foreign safety authority requesting the issue of part B of the certificate in another Member State asked the Rail Authority about the correctness of issued part A of the carrier's certificate. In 2017, there were no problems relating to the mutual recognition of part A. The administrative fee for issue of certificate part A and B amounts to CZK 1,000, i.e., EUR 40.

4.2. A carrier's certificate issued to railway undertakings of other EU Member States

2 new certificates, 2 renewed carrier's certificates part B, and no revision of an already existing carrier's certificate part B were issued in 2017 pursuant to Section 34(h) of Railway Act.

The law of the Czech Republic only defines the fee for renewing the railway undertaking's certificate together for parts A and B in the total amount of CZK 1,000, i.e. EUR 40.

4.3. An infrastructure manager's safety certificate

The safety certificate is issued pursuant to Section 23a of the Railway Act. 1 new and 4 renewed infrastructure manager's safety certificates were issued in 2017.

No revision of an already issued infrastructure manager's safety certificate was issued in 2017. This concerned a change arising from the infrastructure manager's organisational changes. The administrative fee for issue of the safety certificate amounts to CZK 1,000, i.e. EUR 40.

Note: Please note that in general, Czech legislation requires that the management of relevant certificates be governed by the provisions of Act No 500/2004 Coll., the Code of Administrative Procedure, as amended. The administrative procedure term has been fixed at 30 to 60 days based on complexity. Regarding the fact that this period of time does not include the administrative procedure interruption, this instrument is used basically in all cases for completing the application submitted.

4.4. Communication with other national safety authorities

The Rail Authority did not send nor receive any requests for information relating to part A of a carrier's certificate that had been issued in another EU Member State.

4.5. Procedural issues

There were no major problems with issuing new or revised certificates.

4.6. Feedback

Assigned Rail Authority personnel provide consultancy to all interested applicants prior to the issue of a certificate.

5. AMENDMENTS TO LEGAL REGULATIONS

5.1. *Applicable legal regulations*

- Act No 266/1994 Coll. on Rail Systems
 - promulgated in the Collection of Laws as regulation No 319/2016 Coll., with effect from 1 April 2017
 - promulgated in the Collection of Laws as regulation No 183/2017 Coll., with effect from 1 July 2017
 - promulgated in the Collection of Laws as regulation No 304/2017 Coll., with effect from 4 October 2017
 - promulgated in the Collection of Laws as regulation No 225/2017 Coll., with effect from 1 January 2018
- Act No 320/2016 Coll. on the Transport Infrastructure Access Authority
- Act No 500/2004 Coll., the Code of Administrative Procedure
 - promulgated in the Collection of Laws as regulation No 183/2017 Coll., with effect from 1 July 2017
 - promulgated in the Collection of Laws as regulation No 225/2017 Coll., with effect from 1 December 2017
- Government Regulation No 589/2006 Coll. stipulating a different arrangement of working time and rest periods of employees working in the transport sector
- Government Regulation No 133/2005 Coll. on technical requirements for operational and technical interoperability of the European Railway System
- Act No 250/2016 Coll. on responsibility for offences and relating proceedings, repealing Act No 200/1990 Coll.
- Act No 255/2012 Coll. on inspection (Inspection Code)
 - promulgated in the Collection of Laws as regulation No 183/2017 Coll., with effect from 1 July 2017
- Commission Implementing Regulation (EU) No 402/2013 on the common safety method for risk evaluation and assessment and repealing Regulation (EC) No 352/2009
- Commission Directive 2009/149/EC amending the Railway Safety Directive as regards Common Safety Indicators and common methods to calculate accident costs (Commission Directive 2014/88/EU of 9 July 2014 amending Directive 2004/49/EC of the European Parliament and of the Council as regards common safety indicators and common methods of calculating accident costs)
- Commission Regulation (EU) No 1078/2012 on a common safety method for monitoring to be applied by railway undertakings, infrastructure managers after receiving a safety certificate or safety authorisation and by entities in charge of maintenance
- Regulation (EU) 2016/796 of the European Parliament and of the Council on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004*
- Directive (EC) 2016/797 on the interoperability of the rail system within the European Union*
- Directive (EC) 2016/798 on railway safety*
- 3/2016 Position of the EU Council with a view to the adoption of a Directive of the European Parliament and of the Council on railway safety
- Directive 2004/49/EC on safety on the Community's railways (the Railway Safety Directive)

- Commission Regulation (EU) No 445/2011 on a system of certification of entities in charge of maintenance for freight wagons and amending Regulation (EC) No 653/2007
- Directive 2008/110/EC of the European Parliament and of the Council of 16 December 2008 amending Directive 2004/49/EC on safety on the Community's railways (Railway Safety Directive)

*) with effect from 1 January 2019

5.2. Amendments to the Railway Act and its implementing regulations

Applicable legal regulations implementing the Railway Act

- Regulation No. 76/2017 Coll., on the content and scope of services provided to the carrier by the infrastructure manager and service facility operator, as amended
 - promulgated in Section 28 (Volume 2017 of the Collection of Laws), with effect from 1 April 2017
- Regulation amending regulation No 376/2006 Coll. on the management system for rail operation safety and rail transport safety and on procedures in the event of incidents on railways, as amended
 - promulgated in the Collection of Laws as regulation No 77/2017 Coll., with effect from 1 April 2017
- Regulation amending regulation No 173/1995 Coll., issuing the rail system regulations, as amended
 - promulgated in the Collection of Laws as regulation No 78/2017 Coll., with effect from 1 April 2017
- Regulation amending regulation No 9/2015 Sb on defining details and specimens of authorisations for the performance of state supervision, specialised state supervision, supreme state supervision and supreme specialised state supervision in transport in the form of a license and on amendment of related directives, as amended
 - promulgated in the Collection of Laws as regulation No 80/2017 Coll., with effect from 1 January 2018
- Regulation on costs and savings directly related to the provision of replacement transport for interrupted public passenger rail transport and the way of their determination
 - promulgated in the Collection of Laws as regulation No 116/2017 Coll., with effect from 28 April 2017
- Regulation amending regulation No 177/1995 Coll., issuing the rail system building and technical regulations, as amended
 - promulgated in the Collection of Laws as regulation No 117/2017 Coll., with effect from 28 April 2017
- Directive amending Directive No 16/2012 Coll. on professional qualification of railway vehicle drivers and personnel performing inspections, revisions and tests of selected technical equipment and on amendment of Directive of the Ministry of Transport No 101/1995 Coll., issuing the Regulations for medical and professional qualification of persons involved in the operation of rail systems and rail transport, as amended
 - promulgated in the Collection of Laws as regulation No 130/2017 Coll., with effect from 1 May 2017

- Regulation amending regulation No 101/1995 Coll, on the health and professional competence of persons operating railways and rail transport, as amended
 - promulgated in the Collection of Laws as regulation No 129/2017 Coll., with effect from 11 May 2017
- Regulation amending regulation No 100/1995 Coll, which sets out the conditions for operating, designing and manufacturing of selected technical equipment (Selected technical equipment Code), as amended
 - promulgated in the Collection of Laws as regulation No 128/2017 Coll., with effect from 1 May 2017

Amendments to the Railway Act

Amendment No 319/2016 Coll. (as of 1 April 2017), selected parts:

It includes amendments to the Act in following areas: categorisation of railways, entrepreneurial activities of carriers and infrastructure managers, service facilities, system of remuneration for services, licences, access to railway infrastructure and its limitations, organisation of state administration in the field of rail transport, financing of rail transport, price regulation, investigation of accidents and incidents.

- ✓ Section 2 – amendments of the basic terms: ‘... has a branch in the Czech Republic’, ‘Service facility means...’, ‘Railway infrastructure capacity means ...’, ‘The allocation of railway infrastructure capacity means ...’, ‘Member state is ...’
- ✓ Section 3 – the categories of railways include new items: ‘local railway and test track’
- ✓ Section 4a – protection of railway, new wording ‘Level access roads to the platform are accessible to the public, with the exception of crossing the railway line, when: ...’
- ✓ Section 8 – protection zone of the track is newly defined for ‘local railway and test track’
- ✓ Sections 9 and 10 – the term ‘real estate’ is replaced by ‘immovable assets’
- ✓ Section 12 – the term ‘competent for legal acts’ is replaced by new term ‘legally competent’
- ✓ Section 16(2) – newly defines the conditions for the issue of an official permit for the test track
- ✓ Section 23b, c – ‘Restriction of rail operation’ has been changed completely
- ✓ Sections 24 and 24a – This is a systematic modification of the content of the existing provisions within Section 24 governing the conditions of operation of rail transport in the territory of the Czech Republic. The fundamental changes are the requirements for the carriers operating freight railway transport to have a seat on the territory of European Union. So far, the law wording allows the operation of these services also for the carriers with seat in third countries, which goes beyond both EU law and also relevant international treaties (COTIF). Following of the abolition of the permit for the operation of rail transport on the cableway, access rights to this cableway are also regulated. They are no longer bound by official permit granted, but considering the nature of these cableways, the operator can operate rail transport on them without further actions. For the special, tram and trolleybus lines, a license is retained, but the process of granting this license is significantly simplified for the operators of these lines. Defining the validity of license for other categories of tracks (‘higher’ ones – e.g. EU licenses also on branch and local tracks, licenses for branch and local tracks, as well as for junction with regional or national railways). Complex modification of licensing procedure is proposed. Generally

speaking, the processing procedure has been modernised and cleaned so that it does not contain duplications and unjustified deviations from the Code of Administrative Procedure, and the material procedure has been specified in the framework of existing licensing conditions.

- ✓ Section 25 – ‘Granting the authorisation for the operation of rail transport’ is changed and the power to grant it is entrusted to rail administration authority
- ✓ Sections 26 to 28 – They define the content of the individual requirements for license granting, clarifies and fills the gaps in the existing wording. As to the probity, sufficient powers are given to the rail administration authority so as to verify real compliance with this requirement and criminal liability of legal entities is also taken into consideration. Professional competence now includes also higher professional education. The connection of licence with particular lines or vehicles has been removed from the act wording and also the option to impose operating conditions, with the aforementioned exemption for urban rail transport. Also, the disputes arising in connection with the conclusion contracts for the operation of rail transport are no more resolved by rail administration authority. In a modified form, the scope and powers to resolve disputes concerning contracts for the operation of rail transport were entrusted to the Transport Infrastructure Access Authority.
- ✓ Sections 29 to 31 – This is a modernisation of the procedures for licence changing and withdrawing; pursuant the directive, the possibility to grant an additional period for recovering financial capacity was added.
- ✓ Section 38(5) – ‘Restriction and suspension of public rail transport’ contains a new sentence ‘... Infrastructure operator is authorised to operate such a line to a limited extent. Within the limited line operation, the infrastructure manager is obliged to provide for regular examinations and inspections of specified technical parameters of line components in accordance with the rules for line operation.’
- ✓ Chapter two ‘THE QUALIFICATION FOR DRIVING OF RAILWAY VEHICLES’ – Regulation in the field of authorisation to drive railway vehicles following the definition of a new category of railways and the addition of a similar validity of licence for the driving of railway vehicles on connected lines as it is so in the case of a license for local and branch lines.
- ✓ Section 46h(2) – new wording ‘If a train driver learns of facts which raise doubts as to his/her fitness to perform his/her duties, he/she shall immediately inform the carrier or infrastructure manager, which is his/her employer.’
- ✓ Section 46s ‘Requirements for professional qualification of persons involved in the operation of rail systems and rail transport’ – This a partial amendment and addition of the text following Directive 2007/59/EC that resulted from the communication with the European Commission.
- ✓ Section 47 – Regulation reflecting the existence of tows for water skiing that can be used in similar was as ski lifts in winter.
- ✓ Section 49 ‘INCIDENTS’ – Modification of the definition of term ‘incident’, the causes of which are investigated by the Rail Safety Inspection Office, namely in relation to the definition of these terms in Article 3 of the directive 2004/49/EC. In contrast to the directive, standard national terminology is used that use ‘mimořádná událost’ as an umbrella general term for accident and also incident (in Czech wording of directive

2004/49/EC the incident is translated as ‘mimořádná událost’). Considering the abolition of the lower limit for damage in the definition of an accident (Directive 2004/49/EC does not define such limitation), it is proposed to explicitly maintain this limitation for accident reporting to the police. In addition, Section 49 proposes the removal of the obligation to take corrective measures following the amendment of the regulation on the exercise of state control.

- ✓ PART EIGHT ‘ADMINISTRATIVE DELICTS’ – Formal modifications of bodies of case in administrative delicts following the changes made in the relevant provisions of the Railway Act and addition of some new infractions and administrative delicts related to newly introduced duties. In relation to new bodies of case, new fine rates have been proposed for administrative offenses. It is proposed, firstly to revoke the competence and power of the Rail Safety Inspection Office to hear administrative delicts and to impose sanctions because potential inconsistency of this regulation with the Directive 2004/49/EC. The scope has been preserved in only one case, namely the imposition of sanctions for an infraction, resp. administrative delict consisting in the failure to provide mandatory co-operation in investigating the causes of incidents. The hearing of this type of administrative delict is not in contradiction with Directive 2004/49/EU (aiming at enforcing the powers of the Rail Safety Inspection Office) and it is appropriate from the point of view of procedural economy to keep this new delict under the jurisdiction of the Rail Safety Inspection Office. In addition, it is proposed to include the power of Transport Infrastructure Access Authority to impose sanctions in areas related to capacity allocation and access to railways or to service facilities. This is a draft of new comprehensive definition of activities and powers of Rail Safety Inspection Office within the investigation of serious accidents, accidents and incidents. The proposed wording is fully based on Directive 2004/49/EC, taking into account similar regulation for other types of transport.
- ✓ Section 53b – Basic definition of the investigation and its commencement. When compared to the current regulation, the criteria for considering the initiation of an accident and incident investigation are transferred from the implementing regulation (decree) to the level of act. When compared with current wording, the requirement is included explicitly in the draft as to the independence of the investigation in relation to other authorities and administrative procedures, and the requirement is more precisely defined as to the exclusion the determination of liability or fault within the investigation. Following to the Directive, also the deadlines and the bodies concerned were also specified that should be notified on investigation start and course and that are entitled to give their opinion.
- ✓ Sections 53c and 53d – This is a new regulation governing the procedure within an investigation in cooperation with an inspection body from another state and the competence of inspectors in the investigation of accidents; here the regulation on the investigation of accidents in air transport was also taken into account, namely giving the possibility to invite an external expert consultant to examination and the possibility to request expert opinion.
- ✓ Section 53e – New regulation of the final report on the investigation. A substantial change has been made in the matter of safety recommendations that should now be, in line with Directive 2004/49 EC, addressed to state administration bodies, e.g. primarily the Rail

Authority, which, on the basis of these recommendations, should take appropriate measures (as a standard, performing a state inspection and imposing of corrective measures, initiation of sanction procedures in the broader sense, modification of administrative practice etc.) and to inform the Rail Safety Inspection Office about them.

- ✓ Section 56a (2) – new wording: ‘The rail administration authority issues a binding opinion within the procedure for the suspension, restriction or prohibition of tree felling under the Nature and Landscape Protection Act when it is dealing with felling aimed to ensure the operability of railway or to ensure smooth and safe rail transport on this track. If a suspension, restriction or prohibition of felling endangered this purpose, the rail administration authority would issue a binding opinion. It is proposed to grant rail administration authority the power to issue a binding opinion for the Nature Conservation and Landscape Protection Authority within the procedure on removal of trees near railway‘.

- ✓ Sections 57 and 57a – Implementation of the requirements of Directive 2012/34/EU for the cooperation between national authorities and the regulatory body and on the cooperation of regulatory bodies from different member states of the European Union. With regard to the content of the national cooperation under the Directive, including the provision of opinions by individual authorities before the decision in the proceedings is taken and consideration of these opinions, suitable form of cooperation seems to be to grant the position of concerned body pursuant to the Code of Administrative Procedure to the Railway Authority in the proceedings conducted by the Transport Infrastructure Access Authority, and to the same authority in defined procedures conducted by the Rail Authority.

- ✓ Sections 58 and 59 ‘State supervision‘– New wording of stipulations governing the performance of state supervision. In addition to wording clarification, it deals especially with the introduction of the possibility to impose corrective measures in connection with the inspection realised, namely within of a special follow-up administrative procedure. In accordance with Directive 2004/49/EC, the exercise of state control is no longer entrusted to the Rail Safety Inspection Office.

Change No 183/2017 Coll. (as of 1 July 2017), selected parts:

- ✓ The title of part eight reads: ‘INFRACTIONS‘
- ✓ Words ‘natural persons‘ are added to the title of Section 50
- ✓ Words ‘Administrative delicts‘ are replaced with ‘Infractions‘
- ✓ Sections 5(8) and 52(12) – introductory provisions read:
‘A fine up to following amount may be imposed in the case of infraction‘
- ✓ Section 52a ‘Common provisions‘ – a new wording ‘The infractions under this Act shall be heard by the rail administration authority with following exceptions: the infractions pursuant to Section 50(1)(i) and the infractions pursuant to Section 51(1)(l) that are heard by Rail Safety Inspection Office; the infractions pursuant to Sections 51(4)(h) to 51(4)(q), 51(5)(g), 51(7) a 52(7), that are heard by Authority; infractions pursuant Section 52 (6), when the infraction is committed by the travel agent or the travel agency operator, which is heard by local Trade Supervisory Office. The infractions pursuant to Section 50(1)(c) to (f) may be handled by the Police of the Czech Republic by means of fixed penalty ticket. The fines imposed pursuant to this Act shall be collected by the authority which has imposed them.‘

Amendment No 225/2017 Coll. (as of 1 January 2018), selected parts:

- ✓ Section 7(3) stipulates: ‘For the purpose of placing, permitting, notification or approval of construction on a track, a construction that is not a construction of track and extend partially to its periphery or a construction in the protection zone of the track, the applicant is required to request a binding opinion of the rail administration authority. In its affirmative binding opinion, the rail administration authority shall determine the conditions for ensuring the safe and smooth operation of the railway and its protection. Disagreeing opinion may only be issued if the safe and smooth operation of the railway and its protection could be prevented or compromised by the construction, and this risk cannot be eliminated even by the determination of the conditions under the second sentence.‘
- ✓ In Section 9(1), the words ‘establish and operate constructions‘ are deleted.

6. APPLICATION OF COMMON SAFETY METHOD FOR RISK EVALUATION AND ASSESSMENT

Railway undertakings use common safety methods to implement safety management principles in the form described in Annex III to the Railway Safety Directive. Common safety objectives and national reference values are used by the railway undertakings as reference data for determining their own safety objectives. Commission Regulation (EU) No 1158/2010 of 9 December 2010 on a common safety method for assessing conformity with the requirements for obtaining railway safety certificates and Commission Regulation (EU) No 1169/2010 of 10 December 2010 on a common safety method for assessing conformity with the requirements for obtaining a railway safety authorisation apply to applications for the safety certificates.

This area is governed by the measure relating to the enforcement of Commission Regulation No 402/2013 on the common safety method for risk evaluation and assessment and repealing Commission Regulation (EC) No 352/2009 (hereinafter referred to as 'Regulation No 402/2013') and the Rail Authority's Guideline for enforcing Regulation No 402/2013.

The purpose of this Guideline is to establish procedures for the relevant employees of the Rail Authority, as well as for applicants in terms of applying Commission Regulation (EC) No 402/2013, as stipulated in Article 6(3)(a) of the Railway Safety Directive.

This Guideline applies to putting structural sub-systems and vehicles into operation, their modifications and upgrades, as well as to organisational and operational changes. Commission Regulation No 352/2009 can be applied to vehicle systems and changes under the advanced development stage, as defined in Article 2(6) of Regulation No 402/2013.

The good practices code is mainly preferred for the application of risk management; however, the applicants also use reference systems (both similar and deviating ones), methods of clear risk assessment (in particular, FTA, FMEA) and various combinations of all stated principles of risk acceptability.

6.1. *Experience of National Safety Authority*

The Rail Authority requires applicants to attach a Safety Assessment Report to major changes to be evaluated, thus supervising the quality and level of outputs of safety assessment bodies, as has been designated by the Ministry of Transport, inter alia, as one of the acknowledging bodies. In the Czech Republic, it is also acceptable to request accreditation by safety assessment bodies to be conducted by the Czech Accreditation Institute (ČIA). Unlike accreditation of the safety assessors by the Czech Accreditation Institute, acknowledgement of the safety assessment body by the Rail Authority is free of charge.

The Rail Authority received 154 safety assessment reports in 2017. Since 21 May 2015, the Rail Authority has been requesting the safety declaration from the applicants for both operational and organisational changes.

In order to ensure better transparency of the applicants' information about specific change classification, the Rail Authority utilised their obligation to elaborate such safety statements, differentiating them in the scope of the risk assessment requirement to:

- safety statement type A, organisational changes do not influence operational and maintenance procedures;
- safety statement type B, rail system change does not influence safety;
- safety statement type C, rail system change influences safety, however, not seriously;

- safety statement type D, rail system change is major (a safety assessment report must be attached to the request).

6.2. *Feedback from stakeholders*

Feedback from applicants and independent safety assessors is obtained via consultations with the Rail Authority's employees authorised to evaluate the safety assessment reports (safety assessors appointed directly by the Rail Authority director). The Rail Authority also participates in the ACRI's workshops on the application of Regulation (EC) on a common safety method.

6.3. *Revision of National Safety Regulations (NSRs) to take into account the EC regulation on CSM for risk evaluations and assessment*

There was a revision of national safety regulations in 2017 (Provision No. 2/2017 National Safety Authority 'COLLABORATION OF INDIVIDUAL DEPARTMENTS WITHIN THE RAIL AUTHORITY IN THE IMPLEMENTATION OF THE COMMISSION IMPLEMENTING REGULATION (EU) No. 402/2013').

7. EXCEPTIONS RELATING TO THE SYSTEM FOR GRANTING CERTIFICATES TO ENTITIES IN CHARGE OF MAINTENANCE

In 2017, there was no case of application of Article 14a(8) of Directive 2008/110/EC of the European Parliament and of the Council of 16 December 2008, amending Directive 2004/49/EC on safety:

"Member States may decide to fulfil the obligation to identify the entity in charge of maintenance and to certify it through alternative measures in the following cases:

- a) vehicles registered in a third country and maintained according to the law of that country;*
- b) vehicles which are used on networks or lines the track gauge of which is different from that of the main rail network within the Community and for which fulfilment of the requirements referred to in paragraph 3 are ensured by international agreements with third countries;*
- c) vehicles identified in Article 2(2), and military equipment and special transport requiring an ad hoc national safety authority permit to be delivered prior to the service. In this case, the derogations shall be granted for periods not longer than five years."*

8. APPLICATION OF THE COMMISSION'S REGULATION ON A COMMON SAFETY METHOD FOR MONITORING

Infrastructure managers and carriers apply Commission Regulation (EU) No 1078/2012 on the CSM for monitoring ('Regulation No 1078/2012'). In practice, Regulation No 1078/2012 is mainly implemented by way of creating and performing plans for inspections of safe railway transport operation and incorporating knowledge arising from Regulation No 1078/2012 into internal regulations. In case of discrepancies found, by implementing corrective measures. Feedback is provided in individual annual reports.

CONCLUSION

The Annual Report on the Rail Authority's performance generally evaluates the safety of railway transport and operations of railway infrastructure in the Czech Republic for 2017. It also provides information about the progress of the gradual performance and implementation of the safety directive into national statutory regulations.

The Rail Authority met its target in 2017 to perform state supervision to verify the proper functioning of safety management, and it will continue to conduct inspections of other infrastructure managers and carriers in 2018.

The main priority is given to railway safety and the safe transport of passengers and goods, especially dangerous goods, which might result in accidents and incidents. Cooperation with other national security authorities (NSAs) has also taken place. An agreement was concluded between the UTK and the DÚ 'On Coordination of Methods of Supervisory Activities' on 23 November 2017. In addition, an agreement between EPSF and DU was concluded on the 'Implementing the procedures for facilitating the movement of locomotives and railway vehicles within conventional rail systems' on 5 July 2017.

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ANNEX A – Summary of accidents in 2017

Summary of accidents in 2017 – according to the definition of Commission Directive 2009/149/EC amending the Railway Safety Directive as regards Common Safety Indicators (CSI) and common methods to calculate the economic impact of accidents (see Table 3).

Common Safety Indicators of accidents are sorted in following classes (CSIs are based on annual safety reports of infrastructure managers of national and regional railways):

1. indicators relating to serious accidents,
2. indicators relating to serious injuries,
3. indicators relating to fatalities,
4. indicators relating to dangerous goods,
5. indicators relating to suicides,
6. indicators relating to precursors of accidents,
7. indicators relating to economic impact,
8. indicators related to the technical safety of infrastructure,
9. transport and infrastructure reference data.

1.1a. Celkový počet těžkých nehod rozdělený do následujících kategorií nehod.				
	N011	Collision of train with railway vehicle		2
	N012	Collision of train with an obstacle in clearance profile		9
	N02	Train derailment		2
	N031	Accidents on level crossings without safety installations, marked with warning crosses		10
	N032	Accidents on level crossings with safety installations controlled by staff		1
	N033	Accidents on level crossings with automatic safety installations with warning boards without barriers		20
	N034	Accidents on level crossings with automatic safety installations with warning boards and barriers		5
	N035	Accidents on level crossings with automatic safety installations with warning boards, barriers and rail safety installations, which is a signal device or another train control system allowing the train to proceed only when the level crossing is secured and not interfered with by a road user.		0
	N04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		39
	N05	Fire or explosion in a railway vehicle		2
	N06	Other accidents		7
2.2a. Celkový počet vážně zraněných cestujících rozdělený dle kategorie nehody.				
	PS011	Collision of train with railway vehicle		0
	PS012	Collision of train with an obstacle in clearance profile		0
	PS02	Train derailment		0
	PS03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	PS04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		4
	PS05	Fire or explosion in a railway vehicle		0
	PS06	Other accidents		1
2.3a. Celkový počet vážně zraněných zaměstnanců a jiných osob účastnících se provozování dráhy nebo drážní dopravy.				
	SS012	Collision of train with an obstacle in clearance profile		3
	SS02	Train derailment		0
	SS03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	SS04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		0
	SS05	Fire or explosion in a railway vehicle		0
	SS06	Other accidents		1
2.4a. Celkový počet vážně zraněných uživatelů úrovnových přejezdů rozdělený do následujících kategorií.				
	LS011	Collision of train with railway vehicle		0
	LS012	Collision of train with an obstacle in clearance profile		0
	LS02	Train derailment		0
	LS03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		28
	LS04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		0
	LS05	Fire or explosion in a railway vehicle		0
	LS06	Other accidents		0
2.5a. Celkový počet vážně zraněných nepovolanců osob, tj. osoby, jejichž přítomnost je v prostoru dráhy zakázána, s výjimkou uživatelů úrovnových přejezdů, rozdělený do následujících kategorií.				
	US011	Collision of train with railway vehicle		0
	US012	Collision of train with an obstacle in clearance profile		0
	US02	Train derailment		0
	US03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	US04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		15
	US05	Fire or explosion in a railway vehicle		0
	US06	Other accidents		0
2.6a. The total number of other seriously injured persons sorted into the following categories.				
	OS011	Collision of train with railway vehicle		0
	OS012	Collision of train with an obstacle in clearance profile		0
	OS02	Train derailment		0
	OS03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	OS04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		0
	OS05	Fire or explosion in a railway vehicle		0
	OS06	Other accidents		0
2.7a. Celkový počet jiných osob na nástupišti, tj. osoby, které jsou na nástupišti a které nejsou uvedeny výše, rozdělený do následujících kategorií.				
	OSP011	Collision of train with railway vehicle		0
	OSP012	Collision of train with an obstacle in clearance profile		0
	OSP02	Train derailment		0
	OSP03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	OSP04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		4

	OSP05	Fire or explosion in a railway vehicle		0
	OSP06	Other accidents		0
2.8a. Celkový počet jiných osob mimo nástupiště rozdělený do následujících kategorií.				
	OSE011	Collision of train with railway vehicle		0
	OSE012	Collision of train with an obstacle in clearance profile		0
	OSE02	Train derailment		0
	OSE03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	OSE04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		1
	OSE05	Fire or explosion in a railway vehicle		0
	OSE06	Other accidents		0

3.2a. Celkový počet usmrcených cestujících rozdělený dle kategorie nehody.			
	PK011	Collision of train with railway vehicle	0
	PK012	Collision of train with an obstacle in clearance profile	0
	PK02	Train derailment	0
	PK03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)	0
	PK04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself	1
	PK05	Fire or explosion in a railway vehicle	0
	PK06	Other accidents	0
3.3a. Celkový počet usmrcených zaměstnanců a jiných osob účastnících se provozování dráhy nebo drážní dopravy.			
	SK011	Collision of train with railway vehicle	0
	SK012	Collision of train with an obstacle in clearance profile	0
	SK02	Train derailment	0
	SK03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)	0
	SK04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself	0
	SK05	Fire or explosion in a railway vehicle	0
	SK06	Other accidents	0
3.4a. Celkový počet usmrcených uživatelů úrovnových přejezdů rozdělený do následujících kategorií.			
	LK011	Collision of train with railway vehicle	0
	LK012	Collision of train with an obstacle in clearance profile	0
	LK02	Train derailment	0
	LK03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)	20
	LK04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself	0
	LK05	Fire or explosion in a railway vehicle	0
	LK06	Other accidents	0
3.5a. Celkový počet usmrcených nepovoláných osob, tj. osoby, jejichž přítomnost je v prostoru dráhy zakázána, s výjimkou uživatelů úrovnových přejezdů, rozdělený do následujících kategorií.			
	UK011	Collision of train with railway vehicle	0
	UK012	Collision of train with an obstacle in clearance profile	0
	UK02	Train derailment	0
	UK03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)	0
	UK04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself	10
	UK05	Fire or explosion in a railway vehicle	0
	UK06	Other accidents	0
3.6a. Celkový počet ostatních usmrcených osob rozdělený do následujících kategorií, bez ohledu na to, zda k nehodě došlo.			
	OK011	Collision of train with railway vehicle	0
	OK012	Collision of train with an obstacle in clearance profile	0
	OK02	Train derailment	0
	OK03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)	0
	OK04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself	0
	OK05	Fire or explosion in a railway vehicle	0
	OK06	Other accidents	0
3.7a. Celkový počet jiných osob usmrcených na nástupišti, tj. osoby, které jsou na nástupišti a které nejsou uvedeny výše, rozdělený do následujících kategorií, bez ohledu na to, zda k nehodě došlo.			
	OKP011	Collision of train with railway vehicle	0
	OKP012	Collision of train with an obstacle in clearance profile	0
	OKP02	Train derailment	0
	OKP03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)	0
	OKP04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself	2
	OKP05	Fire or explosion in a railway vehicle	0

	OKP06	Other accidents		0
3.8a. Celkový počet jiných osob usmrcených mimo nástupiště rozdělený do následujících kategorií, bez ohledu na to, zda k nehodě došlo.				
	OKE011	Collision of train with railway vehicle		0
	OKE012	Collision of train with an obstacle in clearance profile		0
	OKE02	Train derailment		0
	OKE03	Accidents on level crossings (including the collisions of railway vehicles with pedestrians on level crossings)		0
	OKE04	Accidents of persons with railway vehicle involved, except for suicides and deliberate serious injuries to oneself		
	OKE05	Fire or explosion in a railway vehicle		0
	OKE06	Other accidents		

1.3a. Celkový počet nehod při přepravě nebezpečných věcí rozdělený do následujících kategorií, které je nutné hlásit dle RID.				
	N19	The number of accidents involving at least one railway vehicle transporting dangerous goods, where dangerous goods have not been released.		0
	N20	The number of accidents involving at least one railway vehicle transporting dangerous goods, where dangerous goods have been released.		0
1.2a. Celkový počet sebevražd.				
	N07	Number of suicides.		203
	N08	Number of deliberate serious injuries to oneself		25
4.1a. Celkový počet původců mimořádných událostí rozdělený do následujících kategorií.				
	I01	Broken of rails.		0
	I02	Track buckles and other discontinuities of the track.		0
	I03	Failure of signalling systems		0
	I04	Passed signal devices in stop position.		129
	I041	Passed signal devices in stop position and threat to permitted movement of another railway vehicle		17
	I042	Passed signal devices in stop position without a threat to permitted movement of another railway vehicle		112
	I05	Broken wheels of operated railway vehicles.		0
	I06	Broken axles of operated railway vehicles.		1
5. Ukazatele pro stanovení hospodářského dopadu nehod				
Pouze následkem vážných nehod.				
	C13	Cost of material damage to rolling stock or infrastructure (serious accidents).	CZK	76 541 151
	C17	Cost of damage to environment (serious accidents). CZK 0180C14 Cost of delays as a consequence of accidents (serious accidents).	CZK	597,928
	C15	Delays of passenger trains (serious accidents).	minutes	26,840
	C16	Delays of freight trains (serious accidents).	minutes	8,394
6. Ukazatele týkající se technické bezpečnosti dráhy a jejího uplatňování				
6.1 Zabezpečovací zařízení				
	TP01	Percentage of the lines with automatic train control in operation, where these systems provide a warning signal		19.10%
	TP02	Percentage of the lines with automatic train control in operation, where these systems provide a warning signal and automatic stopping		0.58%
	TP03	Percentage of the lines with automatic train control in operation, where these systems provide a warning signal, automatic stopping		0.05%
	T01	Percentage of the lines with automatic train control in operation, where these systems provide a warning signal, automatic stopping		0.00%
	TT01	Percentage of train-kilometres with using of on-board systems with automatic train control, where these systems provide a warning signal		0.00%
	TT02	Percentage of train-kilometres with using of on-board systems with automatic train control, where these systems provide a warning signal and automatic stopping.		0.00%
	TT03	Percentage of train-kilometres with using of on-board systems with automatic train control, where these systems provide a warning signal, automatic stopping and point speed monitoring.		0.00%
	T02	Percentage of train-kilometres with using of on-board systems with automatic train control, where these systems provide a warning signal, automatic stopping and continuous speed monitoring.		0.00%
6.2 Počet úrovnových křížení				
	T03	Total number of level crossings (active and passive ones)		8,188
	T06	Total number of active level crossings (with safety installations)		4,145
	T07	Controlled automatically by approaching train, with warning lights and without barriers		2,400
	T081	Controlled automatically by approaching train, with warning lights and barriers		1,380
	T10	Controlled automatically by approaching train, with barriers and warning lights and with safety installations that ensure free crossing.		18
	T15	Controlled by staff		348
	T14	Total number of passive level crossings (secured only by warning crosses).		4,043

8. Referenční data dopravy a infrastruktury				
	R05	Number of train-kilometres within passenger transport	million of train-kilometres	131.340
	R06	Number of train-kilometres within freight transport	million of train-kilometres	37.730
	R02	Number of passenger-kilometres	million of passenger-kilometres	28.344
	R07	Number of freight tonne-kilometres	million of tonne-kilometres	35121.286
	R08	Number of line kilometres (in the case of multi-track lines, only the distance between the starting and ending points is counted).	km	9625.044
	R03	Number of track kilometres (each track of multi-track line is counted).	km	15646.072

Table 3 – Summary of incidents for 2017