Ing. Vítězslav Lössel - Ing. Zdeněk Novotný

Stav bezpečnosti železniční dopravy u ČD, a.s.
State of safety of railway transport at ČD, a.s.

The European Parliament and the Council of the European Union have adopted the Directive 2004/49/EC on safety on the Community's railways (Safety directive). Relating to this an amendment of the Act on Rail Systems and a new regulation on a rail operation and railway transport safety system and on accident and incident investigation procedure was adopted in the Czech Republic. The report describes the safety management system, acquiring safety certification and authorization and accident and incident investigation. The report analyses causes and circumstances of railway accidents and incidents, their statistical classification and factors influencing safety. The report shows measures adopted by ČD, a.s. to increase railway safety in the Czech Republic.

Ing. Jaroslav Grim

Systém ERTMS z pohledu interoperability evropského železničního systému
ERTMS system from the point of view of European railway system interoperability

The article deals with questions of interoperability of the European railway system, more precisely with the ERTMS system and its subsystems ETCS and GSM-R. It contains basic information about preparation and installation process of these systems on Czech lines with as related to the existing legislation of the European Union and the Czech Republic. The article also mentions first experience and knowledge of VUZ as a Notified Body Institute within the conformity assessment process with interoperability requirements and certification of the above-mentioned subsystem and necessary documentation based on requirements of Control Command and Signalling System.

Ing. Jiří Janšta

Přidělování kapacity dráhy a vlakových tras pro ad hoc požadavky s využitím ISOŘ KADR
Allocating infrastructure capacity and train routes capacity for ad hoc requirements with use of ISOŘ KADR

This paper covers accessing the railway network in the environment of a liberalized market, which allows for the existence of multiple train operators (railway undertakings). As a practical solution the information system ISOŘ KADR is introduced which creates an interface among the railway owner, the infrastructure operator and the individual operators. It has as objective fair access of the operators to the railway infrastructure and it offers a comprehensive solution of ordering ad hoc

train routes, including the transfer of these routes into the follow-up information systems of the infrastructure operator. This system supports a fair, non-discriminating access of all authorized operators to the railway infrastructure.

Ing. Martin Malý

Možnosti modernizace kolejových vozidel segmentu regionální osobní dopravy
Railway passenger rolling stock for regional transport – modernisation possibilities

The article is focused on a description of the current state of the passenger railway rolling stock in the Czech Republic and on various possibilities of its future solution. The rolling stock status is analysed, existing attributes of the transport market are determined and there is a possible solution outlined in the paper.

Ing. Jitka Hamplová

Koncepce řídicích vozů
Conception of driving trailers

This entry deals with driving trailers in the history of ČSD, surveys the present situation on lines operated by ČD and outlines the trends in further development of driving trailers. Both driving trailers that are wired in compact units and the driving trailers intended for train sets are mentioned. The article points at the importance of driving trailers in the operator's rolling stock fleet.

Ing. Aleš Ondrůj - Mgr. Ludmila Kadrnková

Zavedení nového způsobu osobního odbavení v síti ČD
Introducing a new way of passenger handling in the ČD network

The article is summarizing results coming out of the implementation of the new passenger handling system at the Main Station in Brno. It describes achievements reached with the new handling system and compares annual growths in efficiency of individual employees with a focus on the number of operations.
It represents basic results that have been achieved after implementing the new passenger handling system: increasing the efficiency of the handling system; a better organization at the station, a unified information system, stressing direct responsibility for the quality of provided services.
A part of the new handling system's implementation was also a new organisation of the agenda concerning issuing reduction and scholars' passes. A strict separation of this agenda from current passenger handling limited blocking passengers requiring quick handling.

Ing. Jaroslav Matuška, Ph.D

Časová náročnost přestupů pro osoby s omezenou schopností pohybu a orientace
Time demands of train changes for persons with reduced mobility and orientation

The questions of transfer (interchange) times between railway platforms for passengers with reduced mobility (not only wheelchair bounds, but for passengers with a baby pram or a cane, children, big luggage or a bicycle as well) are solved in the paper. A passenger on a wheelchair is usually “registered” in the system and if he changes trains, the operator’s employees are informed about it. Information about other passenger is lacking, so that in case the core connection is delayed and the interchange is time demanding the passengers could miss their connecting train. The report mentions model cases of time consumption during changes between trains in nodes with island-type platforms and grade separation access being equipped with an elevator or a vertical platform

PhDr. Jiří Popelka

Psychologie a České dráhy
Psychology and České dráhy

The goal of this article was to describe psychological test of cognitive functions and to show the problems of psychological tests and standards in general. General standards are not totally satisfactory for our use; that’s why we prepared “railway standards” which would reflect the population of railway workers being examined in Centres of Psychological Services. Diagrams and tables point out the structure of people being examined. There is a statistically proved abnormality of files distribution. That’s why we used transformation of statistical data before the proper calculation. All the calculation was done at level of 95% in MS Excel and statistical software named QCExpert by Trilobite s.r.o. Pardubice.

Ing. Jakub Pěchouček - Mgr. Dušan Pouzar

Hlavní způsoby využití simulátorů pro strojvedoucí - shrnutí prvních výstupů projektu 2Train
Main ways of simulator use for train drivers – summary of first outputs of the 2Train project

The aim of the research done (which has beeen solved under the Sixth Framework Programme of the European Community for research, technological development and demonstration activities) was to provide a global overview on content and organization in rail training. Research was focused particularly on using computer

technologies in railway training. It arises clearly from the research that the majority of companies uses simulators in initial training.
Another result of the report is also that thanks to constant price-cutting of production costs the simulator is becoming a fundamental point in training railway company employees. Thanks to this fact usage of other methods that computer-based technology is gradually becoming less used.

Ing. Aleš Bartheldi

Analýza poplatků za přístup na železniční dopravní cestu ve státech projektu Adriatic - Baltic Landbridge
An analysis of track access charges in 6 projects countries Adriatic - Baltic Landbridge

The article introduces the Adriatic – Baltic Landbridge project, which is recently being realized by České dráhy, a.s. The project is co-financed from the ES Interreg IIIB CADSES initiative and it aims at the development of multimodal transport and to the market share increase of non-road means of transport in the Adriatic – Baltic area. Track access charges in 6 projects countries were analysed within the Rail national reports assessment. The article focuses on the level and structure of these charges because of its importance for competitiveness of the rail transport in comparison with other transport modes.

Ing. Václav Michajluk - Ing. Petr Jasanský

INNOTRACK Innovative Track System
INNOTRACK Innovative Track Systém

The article presents basic ideas of the INNOTRACK project (the project under the Sixth Framework Programme of the European Community for research, technological development and demonstration activities); it shows its structure and lists its participants. The article presents the involvement of České dráhy, a.s. in the project and describes realized measuring on the territory of the Czech Republic.