Environmental, Social and Governance Report for 2023

SPRÁVA ŽELEZNIC

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Introductory word by Director General

Railway transport has been a cornerstone of development and integration across the regions of both Europe and the world since the Industrial Revolution. Today, it represents above all a key component of a sustainable future. The benefits of the railway transport have persisted to this day, but the quality of services provided, safety and overall technological level continue to grow. One model example is the large-scale electrification which has put the railway transport decades ahead of other transport sectors.

The decision to take full advantage of the density of the railway network in the Czech Republic over the last two decades has brought with it considerable costs associated with regular maintenance as well as general modernisation. Although the pace of investment should continue to grow, we are already reaping the rewards in the popularity of train travels across our country. Residents of all major urban conurbations are increasingly using high-capacity suburban trains, and we are gradually increasing the travel speed on our backbone lines for long-distance services. Together with the carriers, we are now able to offer passengers an order of magnitude more cost-efficient, many times faster and almost always more comfortable alternative to commuting by car.

Whether the line is also modernised within the framework of the aforementioned electrification process or whether electric trains are introduced to more remote locations with lower costs through the so-called simple electrification, Správa železnic is gradually fulfilling its mission to facilitate reliable, safe and environment-friendly travelling throughout the Czech Republic. In parallel with this development, we are intensively preparing the construction of high-speed lines, which, in addition to a significant increase in the standard of travelling, will also make further important development of freight transport on freed conventional lines possible. Social responsibility and its sub-aspects are deeply rooted in our organisation. Passengers are our daily motivation and driving force. Transparency and cost-effectiveness help us to find more efficient solutions. Many projects perceived as environment-friendly at first sight bring financial savings as well.

On the following pages, you will see that, in addition to responsible railway infrastructure care, we are committed also to our wider role in society over the long term. We are investing in renewable energy sources, developing interconnections to other modes of transport for both passengers and freight, and proactively creating the necessary preconditions for innovations.

Bc. Jiří Svoboda, MBA
Director General

Executive summary

E – Environment

We prioritise the **reuse** of materials. **We protect nature, its biodiversity**, water, air, and public health. We continue with the **electrification** of railway lines. We **reduce electricity** consumption. We modify stations and stops to only consume energy when it makes sense. We **minimise unused spaces** and use them for installing photovoltaic power plants. We support the **construction of charging stations** for electric vehicles.

We develop
the railway as one of the most environmentally friendly modes of transportation.

We care
about being socially responsible and transparent as an organisation. The operational efficiency of the railway contributes to sustainable development and overall societal improvement.

S – Social

We are intensively investing in the development of railway infrastructure, prioritising **increased operational safety**. As **one of the largest employers** in the Czech Republic, our focus is on ensuring the satisfaction of our employees, and we welcome the feedback they provide. We aim for our employees to be experts in their field, providing **continuous education**. Engaging in open **dialogue with communities**, we actively contribute to science and research. As a significant recipient of public funds, we are **transparent to the public** and provide information in a user-friendly format.

G – Governance

Our main task is to **ensure the operability** of the railway. We maintain and **modernise** the railway infrastructure. The number of carriers on our network, to whom we **provide capacity without discrimination**, is constantly growing, leading to the rapid **liberalisation** of the Czech railway system. We **conduct our business ethically**, adhering to corporate principles outlined in our Code of Conduct and Compliance Code. In public procurement, we apply **responsible tendering principles**. We actively explore new business opportunities for the commercial use of station buildings.

We implement
our vision and creating conditions to strengthen the position of the railway as an eco-friendly mode of transportation.

E – Environment

We are protecting the planet, building up a railway system.
We are the backbone of Czech green mobility. We perceive our responsibility for the environment, and we actively look for innovative ways for sustainable railway transport.

Circular principles in practice.
We recycle, for example, aggregate from the track bed and give it a new life. We comprehensively reduce the consumption of primary raw materials and save valuable resources.

Greenery along the railway lines.
It does not have just an aesthetic role. It helps to stabilise slopes, retain water and reduce noise. We ensure traffic safety and protect biodiversity through the regular maintenance and planting of trees.

Protection of animals. We use animal scarers and photo traps to minimise train-animal collisions. By doing so, we protect human lives and the fauna around the lines.

Peaceful neighbourhoods. Modern technologies reduce noise and vibration from railway traffic operations. Continuous welded rails, flexible fixings and noise barriers ensure quiet living near the railway infrastructure. We also look for innovative alternatives, such as rail absorbers and low noise barriers.

Electric traction. We are developing line electrification and offer renewable traction power to carriers. In this way, we reduce emissions and promote clean mobility.

Energy smart buildings. Energy-saving renovations and EPC pilot projects will guarantee proper efficient-energy management. We install photovoltaic power plants on rooftops and brownfield sites and we use the services of an energy consultant.

Transport synergies. We promote electromobility and prepare the infrastructure for charging stations at railway stations. We believe in interconnection of the environment-friendly modes of transport for seamless and sustainable mobility.

S – Social

Passengers and their safety are our priority. We are implementing GSM-R and ETCS systems for safer and smoother operation. We equip line sections and our special railway vehicles with modern technologies to ensure appropriate efficiency and thus also the competitiveness of railway.

We modernise level crossings. We are constantly working to improve the level of safety at level crossings. After a thorough analysis, we cancel or replace redundant or underused level crossings for optimal traffic flows and safety purposes.

Equal opportunities. We endeavour to make railway accessible to all. By 2026, we want to reach 80 % of railway stations and stops accessible to wheelchairs, so that people with impaired mobility and orientation can enjoy the benefits of travel by train.

Satisfied employees. We recognise that employees are the key to success. As at 31 December 2023, we employed 16,893 people and we are one of the largest employers in the Czech Republic. We strive for employee satisfaction and motivation, regularly collecting feedback and reflecting on their needs.

Support to young talents. We cooperate with schools and offer students motivational programmes, practical stays, excursions, internships and professional lectures. We prepare them for a career in the railway sector, trying to ensure an inflow of qualified professionals.

Innovation and research. Building up a modern railway for the 21st century requires innovation. We are committed to research and putting innovative technologies and procedures into practice. The Scientific and Technical Journal serves to disseminate knowledge and share innovations in the field.

Open dialogue. Communication with the public and partners is essential for us. We present construction projects interactively, proactively and accurately informing about traffic restrictions. We systematically gather feedback on services provided as well as the projects under preparation.

G – Governance

We manage the railway ethically and transparently. We follow the Code of Conduct; the Code of Compliance and we control compliance with all rules. The Compliance Officer oversees ethical conduct and investigates allegations of improper conduct.

Responsible public procurement. We respect the principles of social and environmental responsibility. We require application of environment-friendly procedures and encourage students' excursions at suppliers. We implement a qualification system to simplify and speed up the procurement process.

Transparent purchasing of traction electricity. We purchase traction electricity transparently on commodity exchanges and objectively measure consumption of individual carriers.

Transparent asset management. Our asset management follows a transparent and non-discriminatory approach in the handling of our assets, in accordance with the rules of sound management.

Modern use of railway station premises. We are looking for possibilities of how to expand the commercial use of railway station premises and implement innovative concepts. We believe in transformation of railway stations into modern business centres.

Personal data protection. We protect personal data and train employees in this area on an annual basis. A data protection officer oversees compliance with all applicable legal requirements.

Smart technologies in railway stations. We use smart technologies to reduce operational costs, improve passenger service quality and achieve energy savings.

Profile of Správa železnic

Správa železnic was incorporated on 1 January 2003 pursuant to the Act No. 77/2002 Coll., on the joint-stock company "České dráhy", state-owned organisation "Správa železnic", as "Správa železniční dopravní cesty, státní organizace" (Czech Railway Infrastructure Manager, a state-owned organisation). Since 1 January 2020, the current name has been used on the basis of an amendment to the aforementioned Act. Správa železnic ensures, within the meaning of the Act on Rail Systems, the operation of the national and regional railways owned by the State, and is responsible for their operability, modernisation and development to the extent necessary for assurance of the transport needs of the State and transport services. It manages the state property which constitutes the railway infrastructure. It allocates the capacity of the transport route and is the manager of more than 3,300 railway station buildings. It looks after approximately 9,400 kilometres of railway lines; 6,700 bridges and 2,600 railway stations and stops. The mission of Správa železnic is to take care of safe operations and to ensure that the railway operates as a whole for the benefit of customers and passengers. Správa železnic is a member of the International Union of Railways (UIC), the Community of European Railway and Infrastructure Companies (CER) and other major railway associations.

1.1 Social responsibility of Správa železnic

The mission of Správa železnic is to manage the Czech railway system in an economically transparent, environmentally exemplary and socially beneficial manner. All organisations, business companies as well as individuals can contribute to protectionof the environment and to the sustainable development of society. Správa železnic has chosen the objectives which are ambitious and feature a maximum impact, but at the same time are measurable and achievable.

We are a socially responsible organisation and we endeavour to contribute to the overall improvement of the state of society.

1.2 Founder of Správa železnic

The Ministry of Transport performs the founder's function on behalf of the state. The organisation is a legal entity which is capable of acquiring rights and assuming obligations by its own legal acts. The state is liable for its obligations. However, in the case of liabilities for financing the costs of construction and modernisation of the railway infrastructure, the state shall be liable only if a special legal regulation provides for such liability. The legal regulations governing the status and legal relations of a state-owned enterprise shall apply to the organisation mutatis mutandis, unless applicable legal regulations provide for otherwise. The organisation was established for an indefinite period of time.

1.3 Mission of Správa železnic

Správa železnic:

- performs the function of an administrator and operator of nationwide and regional railways owned by the state. It shall ensure an operational, safe, high-capacity and competitive railway infrastructure;
- within the framework of modernisation of existing and construction of new railway lines, it performs the function of an investor in order to ensure sufficient capacity for fast, safe, environmentally efficient and available passenger and freight railway transport;
- contributes to ensuring of safety of railway transport and its management by using modern information technologies;
- plans and establishes timetables for the operated railways and allocates railway capacity;
- strives for the economic use of the entrusted property which is a part of the railway infrastructure;
- takes care of the sustainability of its activities in a responsible manner.

1.4 Vision of Správa železnic

Správa železnic wants to be a modern, flexible and customer-oriented organisation. Our vision is to create the necessary preconditions for the strengthening of the position of railway transport within the framework of both the national and European transport markets and for the transfer of the increasing transport performance in favour of the environment-friendly railway transport. Správa železnic intends to fulfil a key task in strengthening the role of the railway in multimodal transport to enable the development of emission-free mobility across transport modes. Our main focus is always on passengers, for whom we provide a safe, reliable, technologically advanced and high-capacity network, an integral part of the European railway system.

A vision for a green and sustainable railway system:

1. Growth in train transport outputs
2. Digitisation and safety of operation
3. Increasing the share of the electric traction
4. Use of renewable energy sources
5. Strategic objectives in the field of protection of the environment (electric traction, electromobility, renewable energy sources)
6. Strategic objectives in the field of social relations (relations with communities, attractive employer, requalification policy)
7. Strategic objectives in the field of corporate governance (diversity and equal opportunities, Code of Conduct, Code of Compliance, energy management)
8. Portfolio development (high-speed lines, robustness of conventional railways, unification of the traction power supply system, continuation of line electrification, recuperation, freight rail corridors and transhipment points, alternative power sources – hydrogen and batteries)

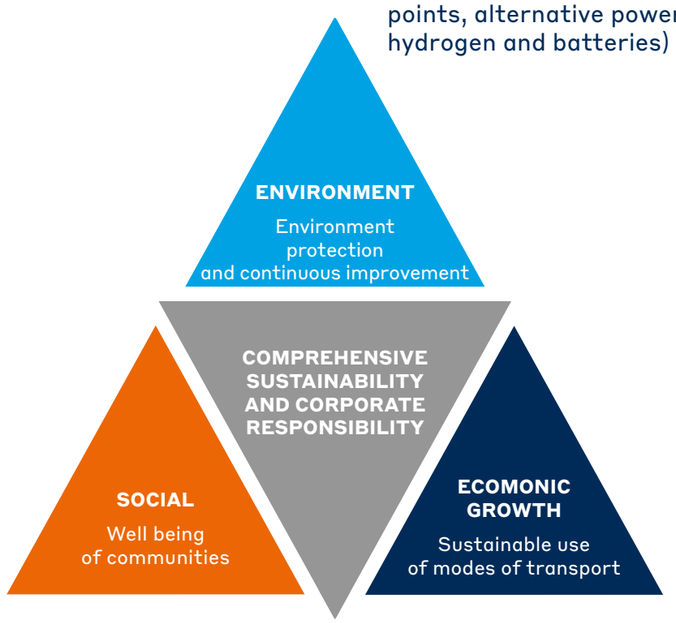


Figure 1. *Diagram of comprehensive corporate sustainability and responsibility*

1.5 Sustainable development strategy of Správa železnic: sustainable mobility for the future

Railway is one of the safest, most innovative and also most efficient modes of transport. The greening of mobility in Europe will be based on a mutually interconnected multimodal transport system for both passengers and freight transport. The high-speed rail network, together with the conventional one and the additional promotion of clean and active mobility, will contribute to the health and well-being of citizens. The European Green Deal calls for a 90 % reduction in greenhouse gas emissions from transport, making the EU a climate neutral economy by 2050, while aiming for zero pollution. Electric traction on railways has the potential to take over a part of the road transport volume and to play a key role in a multimodal transport system. In particular, the key is to increase the number of people using railway services or public transport systems for their travelling, and to create preconditions for shifting significant amounts of freight to railway. There is also an important benefit of internalisation of external costs, where the user also pays the all-society costs.

In its sustainability strategy, Správa železnic has set out strategic targets (ST) in the ESG criteria in relation to the UN Strategic Development Goals:

Sustainable mobility for the future

Strategy of the Správa železnic

ENVIRONMENT

ST 1
Increasing the share of green electric traction
SDG 9, SDG 12

- Continuation of line electrification
- Unification of the traction power supply system to 25 kV AC 50 Hz according to the national implementation plan
- Better use of energy from recovery processes

ST 2
Renewable energy sources
SDG 7, SDG 12

- Acceleration of deployment of clean and environment-friendly technologies and processes
- Development of photovoltaic power plants (hereinafter referred to as “PV plants” or “PVP”) on rooftops and brownfield sites
- Increase in the share of renewable energy sources and heat pumps for heating in buildings

ST 3
Protection of the environment and public health
SDG 3, SDG 11, SDG 12, SDG 13, SDG 15

- Reduction of the proportion of waste deposited in landfill areas through waste prevention, preparation for re-use, recycling or other recovery processes
- Responsible purchases of goods from sustainable resources
- Responsible purchases of products from suppliers with implemented sustainability
- Reduction of the noise loads of the population

ST 4
Emissions related to the organisation’s activities
SDG 3, SDG 11, SDG 13

- Innovative emissions management
- Reporting of direct emissions (scope 1), indirect emissions from energy (scope 2) and other indirect emissions (scope 3)

SOCIAL

ST 5
Sustainability adapting processes within the organisation
SDG 13

- Analytical part (this part analyses impacts)
- Opportunity and risk assessment
- Summary of recommendations:
  - Adaptation measures in the environmental area (E)
  - Adaptation measures in the social area (S)
  - Adaptation measures in the area of organisation administration and governance (G)
  - Adaptation recommendations in the EU taxonomy area (methodology, reporting)

ST 6
Railway and railway transport safety, digitisation
SDG 9, SDG 11

- ETCS deployment – the way to a single European railway and improved safety
  - Implementation according to the Government Resolution of 13 September 2021 No. 795 on the Plan for Modern Control of the Czech Railway Operation – Implementation of the European Train Control System (hereinafter referred to as “ETCS”)
- Programme for increasing the grade of safety at 500 level crossings with roads
- Remote Control of Signalling (RCS) – the way to a safe and efficient railway
  - Remote control of signalling, communication and heavy-current equipment and other follow-up technologies for the needs of railway operation

ST 7
Social relations
SDG 3, SDG 4, SDG 8

- Relations with communities
  - Providing all stakeholders with access to sustainable transport systems, improving rail safety with a particular emphasis on the needs of vulnerable people – children, people with impaired mobility and the elderly.
  - Contributing to increasing the employment of people disadvantaged in the labour market
  - Increasing the number of barrier-free platforms on the national railway lines
- Attractive employer
  - Increasing the number of trainees with a view to future employment

GOVERNANCE
ST 8
Corporate Governance
SDG 5, SDG 8, SDG 16

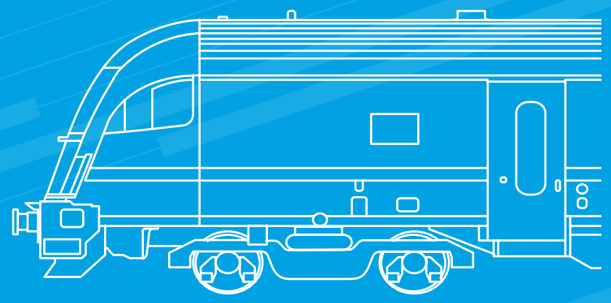
- Diversity and Equal Opportunities Policy
  - Diversity policy applied to the administrative, management and supervisory bodies of the company with regard to aspects such as age, gender, education or professional experience
  - Method of implementation and results achieved during the reporting period
  - Ensuring women's full and effective participation and equal opportunities to hold leadership positions at all levels of the decision-making process in the organisation
- Code of Compliance
  - Increasing the proportion of employees trained in the Code of Compliance
- Energy management
  - Increasing the proportion of employees trained in the energy management area
- Code of Conduct
  - Increasing the proportion of employees trained in the area of the Code of Conduct

INTRODUCTION OF THE EU TAXONOMY
ST 9
Implementation of the EU taxonomy within the organisation
SDG 7, SDG 8, SDG 9, SDG 11, SDG 12, SDG 13

- Sharing the assets, liabilities and capital expenditures of the organisation eligible under the EU taxonomy
- Sharing the costs and revenues of economic activities eligible according to the EU taxonomy:
  - significantly contributing to one or more objectives according to the ESG criteria,
  - not significantly detrimental to any of the ESG objectives,
  - carried out in accordance with the minimum requirements for the sustainability of the organisation's activities

Figure 2. *Overview of UN Sustainable Development Goals*

Environmental

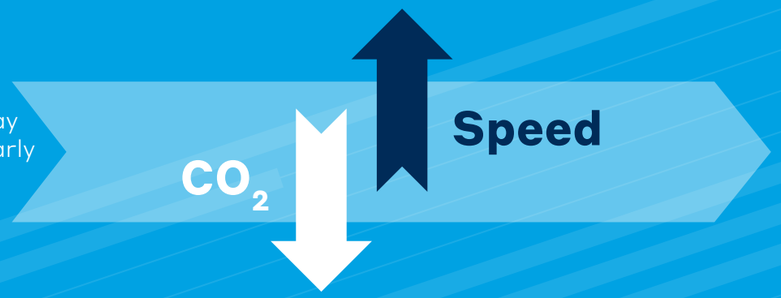


OUR PATH TO SUSTAINABILITY

As an operator of the railway transport network, we endeavour to provide our customers and the general public with the best possible railway transport services, particularly with regard to social responsibility of Správa železnic.

Railway has long been regarded as one of the most environment-friendly modes of mass transport.

The task of Správa železnic is therefore to ensure that this mode of transport is accessible, safe and convenient for the entire society. One way of how to achieve this goal is to carry out the activities in an exemplary manner in terms of the environment-friendly approach.



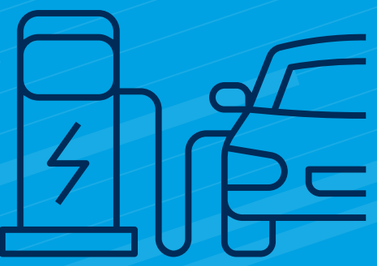
Railway transport will play an increasing role in intercity and shorter international transport in the upcoming years, partially replacing air transport, whereby it is to partly replace the air transport.
Správa železnic perceives this gradual and absolutely fundamental transformation as one of our main tasks in the future, and our steps in railway development are already being adopted today with this transformation in mind.

Circular Economy

From a long-term point of view, we endeavour to achieve the highest possible level of efficiency in our activities, e.g. we reuse some building materials, recycle materials, especially metals, use energy-saving lighting fixtures in our managed buildings, etc.

Microgeneration

We are contributing to the increase in our own level of sustainability by producing our own zero-emission electricity, particularly from solar panels installed on a number of railway buildings rooftops. We then use the energy produced in this way by ourselves or resell it.



Transport Synergy

As it is not possible to replace car transport by railway entirely, the organisation is taking specific steps to promote synergy and continuity between the two elements of mobility in the society, for example by installing charging stands in the car parking areas of its buildings.

A gentle approach to nature

We also take measures which are directly aimed at protecting nature and the landscape or reducing the adverse impacts of our activities. These measures include protection and cultivation of the flora growing around the railway lines, gradual reduction of the use of invasive herbicides, utilisation of low-emission energy sources and many other measures.

Sustainable operation and modernisation of railway lines

2.1 We strive to reuse materials

In the area of railway infrastructure, we focus on the reuse of materials to the maximum extent possible when carrying out capital expenditure projects and repair work. We refer to such material as “reusable” or “secondary” material. During each construction project, our main objective is to prevent waste generation and at the same time we are gradually introducing a system of the so-called circular economy. Naturally, we take into account the quality of the secondary material, ensuring both environmental protection and safety on the railway infrastructure in operation.

It is mainly the material of the railway superstructure, i.e. rails, switch structures, sleepers. This material is then used for repairs and maintenance where it is practical and meets operational safety requirements. This reuse results in significant economic and environmental savings, as it is not necessary to purchase new material. In 2023, 170,364 m of rails of all shapes and 132,707 concrete sleepers were recovered as secondary material and will find their further use. Some of the material which cannot be used for their original purpose, in particular various concrete structures and prefabricated parts, find their application in substructure constructions during renovations. Alternatively, such assets are sold to other entities for construction use.

We also deal with the topic of the recycling of construction and demolition waste, with a short-term goal of reaching a minimum level of 70 % of recycled content.

2.1.1 Waste management

In the area of waste management, Správa železnic is governed in particular by the Act No. 541/2020 Coll., on Waste. Správa železnic is aware of the fact that waste and packaging produced in large quantities can be a risk factor for human health, ecosystems and the environment. This applies not only in terms of excessive waste production, but also during waste management, when non-original substances may be released into the environment and lead to subsequent pollution. That is why Správa železnic seeks to prevent and reduce waste generation in its day-to-day activities, see Chart 1. Správa železnic follows this hierarchy of waste management:

- waste prevention,
- preparation for re-use,
- recycling of waste,
- other uses of waste, such as energy recovery,
- waste disposal.

Chart 1 shows the trend of the gradual evolution of waste generation between 2022 and 2023.

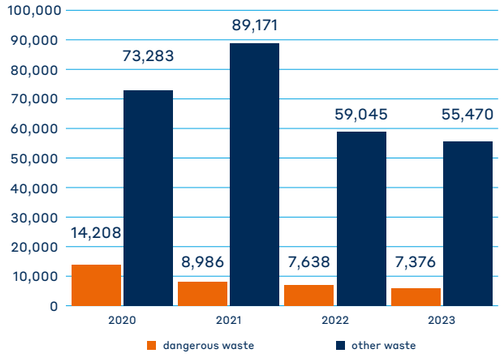


Chart 1. *Waste production per year (for 2020-2023) in tonnes (t)*
Note: In the Chart above, a space is used in place of a comma for separation of thousands (Czech convention)

On the other hand, Správa železnic has managed to increase the share of separated waste components, with Chart 2 showing that metals and metallic waste account for the largest share of the individual components of separated waste, accounting for about 99 % by weight. For 2023, this amounts to 46,575 t, representing a year-on-year increase by 3,291 t. The share of plastics, paper, glass and biodegradable waste then features an order of magnitude lower, see Chart 2.

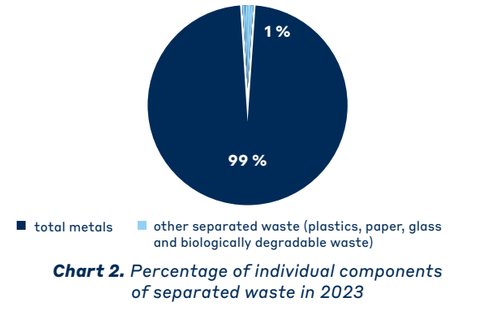


Chart 2. *Percentage of individual components of separated waste in 2023*

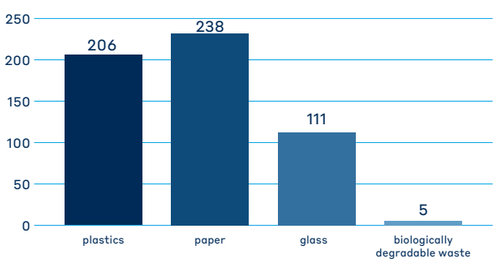


Chart 3. *Share of individual components of separated waste in tonnes in 2023 excluding metal waste*

Another step towards waste prevention is undoubtedly the introduction of take-back of used products. The following selected products are mainly handed over by Správa železnic within the framework of the take-back policy:

- portable, industrial or automotive batteries, other types of batteries, button cells and power packs,
- discharge lamps and fluorescent lamps,
- tyres,
- electrical equipment (e.g. lighting equipment, information technology

and telecommunications equipment, small and large appliances, etc.).

The employees of Správa železnic being in charge of purchasing products and equipment are obliged to check with the seller of such products and equipment for information on the take-back policy or separate collection of the product. On the basis of the information found, they then have the option of handing over, in a free-of-charge manner, according to the instructions of the last seller, or they can discuss the possibility of handing over larger quantities of used products directly with the operator of the collection scheme. Správa železnic cooperates in the field of the take-back policy, for example, with ELEKTROWIN, a.s., EKOLAMP, s.r.o. or ASEKOL, a.s.

2.1.2 Use of regenerated aggregate

In order to ensure economic efficiency and respect for the environment, we have introduced a system of reusing aggregate gained from the track bed, during the preparation and implementation of capital expenditure projects. Whenever approximately five thousand tonnes of aggregate are removed during a particular capital expenditure project, which represents the replacement or installation of a track bed system on approximately two kilometres of a single-track line, reuse is carried out by using a mobile recycling base and the regenerated aggregate is subsequently used within the framework of the construction, both in the fraction of 31.5/63 for the track bed and in the fraction of 0/32 for the structural layers of the substructure. In the case of smaller-scale constructions, where it is not economically viable to use a mobile recycling facility on site, recycling takes place at the facilities of external entities located outside the construction site itself, but the aggregate is not returned back to the construction site.
The technical and economic viability of a model of setting up central intermediate aggregate depots for aggregates recovered from smaller structures, including repair and maintenance works, is currently being investigated, where the regeneration process would only take place after a profitable quantity of aggregate has been collected. The aggregate would then be returned to the superstructure and substructure systems according to the current needs.

The cleaning of the track bed with the help of large rail machinery also has a significant positive impact in terms of saving non-renewable natural resources. The cleaning machine will continuously remove the existing track bed, mechanically sort it through a system of mesh screens according to the grain size and return the 31.5/63 fraction of the appropriate grain size curve back to the track bed. In the case of rehabilitation of the sub-base, carried out by so-called continuous rehabilitation machines, the track bed and part of the sub-base are removed separately. These machines will restore the grain curve and grain sharpness. They make it possible to obtain regenerated aggregate for the track bed (fraction 31.5/63) or reclaimed aggregate for the structural layers of the substructure (fraction 0/32). This material is returned back to the track structure and replenished with new material as required.

From the volume of the aggregate extracted from the track bed, it is possible to recover approx. 30 % of the recoverable aggregate for the track bed in the 31.5/63 fraction and a further approx. 50 % of the aggregate in the 0/32 fraction.

2.2 We reduce our environmental impact

The environment is regulated by quite extensive European and national legislation. Respecting and complying with legal requirements for environmental protection contributes to minimising negative impacts on the surroundings. In addition to the areas of nature and landscape protection, air, waste and water management, including prevention of accidental spills and clean-up of environmental accidents, the general issues of plant health care in relation to the application of biocides and the protection of public health from noise and vibration also fall within this area.

Railway transport, or railway system as such, is considered as a transport mode with an environmental competitive advantage. However, it is essential to continue to further minimise its negative environmental impacts such as noise, vibration, dust and air pollution, including prevention of accidental spills and clean-up of environmental accidents to a maximum possible extent.

	2022	2023
Total non-capital-expenditure costs for the environment	841	950
Total non-capital-expenditure costs for maintenance of buildings	49	53
Total capital-expenditure costs for noise protection measures during line upgrades	72	72

Table 1. *Total capital-expenditure and non-capital-expenditure costs for the environment in 2022 and 2023 (in CZK million)*

In the following subsections, we provide specific examples by individual environmental components, presenting how we endeavour to improve the state of the environment and achieve sustainable development.

2.2.1 Nature and landscape protection

Nature and landscape protection is intensively monitored in the conditions of Správa železnic. We protect all components of the environment during capital expenditure activities and also responsibly maintain the accompanying greenery to ensure a safe railway infrastructure. This usually involves the elimination of non-original wood species of low ecological and aesthetic value, which, if they fall into the passing clearance of the railway line, pose an increased safety risk to the operation of the railway transport.

Our aim is to prevent incidents arising from these phenomena. The average number of such extraordinary events has been, for the recent 5 years, on average 102 cases a year; we record an average of 881 tree falls or falls of parts of trees which are, however, not the cause of an extraordinary event. This situation may be probably influenced by the ongoing climate change, when it is possible to register an increase in extreme weather events and an increase in pests, associated particularly with more frequent drought seasons (bark beetle, wood-boring fungi, etc.), which means that trees are becoming less resistant to external influences.

We are trying to achieve this objective in accordance with the Climate Change Adaptation Strategy in conditions of the Czech Republic through gradual transformation of the existing vegetation around the railway infrastructure into vegetation suitable for safe and smooth operation, furthermore with the possibility of increasing biodiversity. It also appears that in the upcoming period it will be necessary to focus more on vegetation on the plots of land of third-party legal entities in the rail system protection zone and to look for functional mechanisms reducing the level of threat to the rail system.

In addition to responsible maintenance of green areas, we are involved in other pilot projects having an impact on the maintenance of green areas. These include a study to monitor climatic and weather phenomena with an impact on the railway infrastructure or a programme addressing methodologies and measures for an efficient approach to accompanying greenery. Other sub-projects are discussed in the following subsections.

Measures to eliminate the growth of unwanted vegetation

A part of the maintenance of vegetation around the railway infrastructure is also the removal of weeds from the track bed, due to overgrowth of the upper surface of the rails, which can subsequently cause slipping or non-braking of traction vehicles. To suppress the growth of vegetation, we mainly use chemical control means (glyphosate-based substances) and mechanical control such as mowing and cutting.

In the case of chemical control, we perceive a need to reduce the quantity of application of substances based on glyphosate and we favour the use of advanced technologies in the form of so-called selective spraying of tracks, which can lead to a reduction in herbicide dosage while maintaining the same effect. With this technology, spraying can be targeted primarily at weed concentration sites and thus significantly reduce the risk of spreading. This results in a saving of up to 30 % of the amount of the substances applied. We perceive the application of selective spraying as a way of significant reducing the quantity of the herbicides used and the costs incurred from a medium-term point of view.

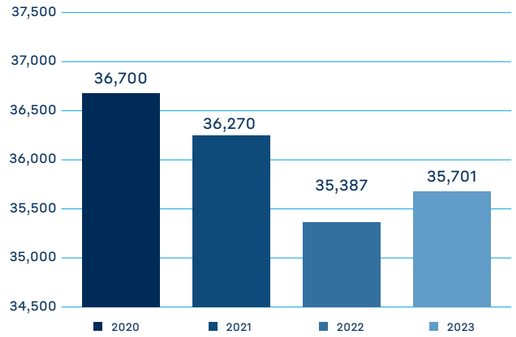


Chart 4. *Consumption of glyphosate-based products from 2020 to 2023 in litres (l)*
Note: In the Chart above, a space is used in place of a comma for separation of thousands (Czech convention)

2.2.2 Biodiversity protection and restoration

Pilot project Replacement of Glyphosate-based Products on Railway Infrastructure

In 2023, we completed the project focused on the testing of new knowledge in the field of vegetation maintenance on railways which could be applied to the railway infrastructure after 2023, when the use of glyphosate-based herbicides was to be phased out. However, the result of this study is, for the time being, confirmation of the irreplaceability of glyphosate on the railway infrastructure. Within the framework of the EU, a similar project is still ongoing, on the basis of requests originating from the Member States. This is due to the need for a longer period of time to test and develop new technologies. This is why the European Commission has also extended the authorisation of glyphosate use for another 10 years, which means until 2033. The aim of the project is to find alternative methods of vegetation maintenance on the railway infrastructure which will have minimum impacts on biodiversity in the closest proximity to the operating lines.

Action greenery care plans and change of landscape nature in the surroundings of the railway infrastructure
The Action Plan for the Maintenance of Greenery along Railway Lines presents our conceptual document for management and maintenance of greenery, especially wood species. The aim of this project is to remove woody plants on selected land of Správa železnic, which may endanger the operation on the railway infrastructure and to achieve the state which is satisfactory both in terms of safe operation of the rail system and the preservation or direct increase of biodiversity. The landscape thus modelled should then evolve in such a way that it requires only minimal intervention and maintenance in the future.

Maintenance on sections of selected lines exposed to frequent tree falls
In 2023, we initiated the project based on the increasing number of incidents caused by frequent tree falls, but which do not show visible deterioration in health. These are trees growing in and out of the forest in the rail system protection zone, and on land owned by others. Správa železnic has assessed the necessity of finding solutions to the above-mentioned problems in the identified locations of the corridor lines, see Fig. 1.

Tree falls on the corridor lines for the 2019-2023 period
- CPS land

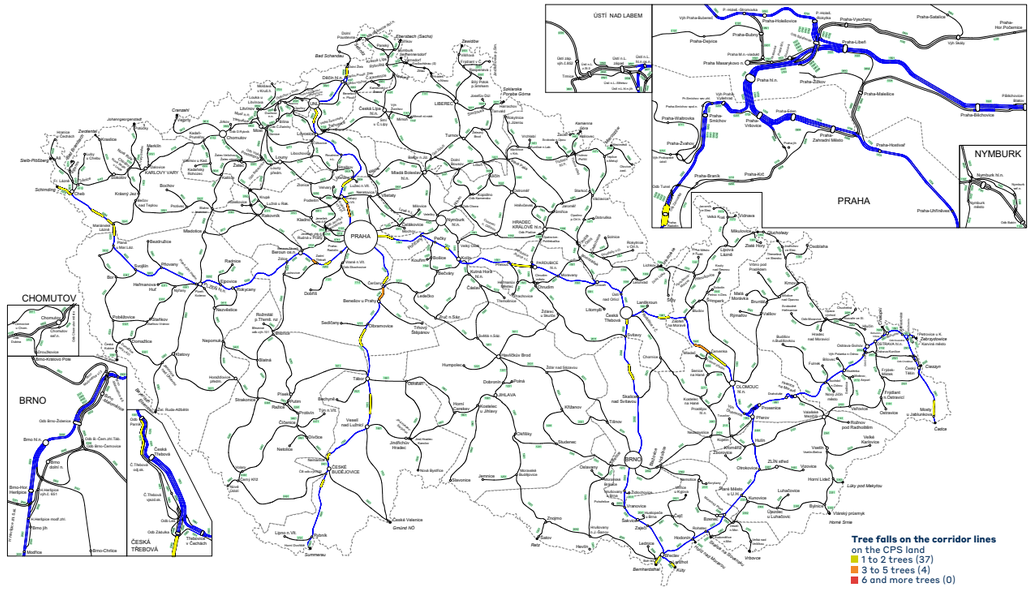


Figure 3. *Selected sections of repeated tree fall incidents on the corridor lines from land belonging to foreign owners for the 2019-2023 period of time*

2.2.3 Water management and protection
In connection with the protection of water and water resources, we are primarily governed by the legislation in force, in particular by the Act No. 254/2001 Coll., on Water, which imposes on everyone who handles water the obligation to take care of its protection and to ensure its economic and efficient use. This is what we try to do during the operation of the station buildings and other facilities where water is handled.

We service and carry out wastewater analyses at more than 50 wastewater treatment plants (so-called domestic treatment plants). We try to arrange water analyses with local companies to minimise the transport of samples to laboratories. We also support the connection of properties to a sewer line terminating at a central treatment plant.

We register approximately 600 wells. In the case of drinking water offtakes, we check not only the quantity of water but also compliance with applicable hygiene limits. Compliance with the quantity of water taken in accordance with the permits is a matter of course, even in times of drought. To prevent groundwater pollution in areas where rolling stock is parked, we coordinate the laying of sorption fabrics. This type of material prevents small drips of operation fluids from these vehicles from reaching the subsoil and subsequently polluting the soil and groundwater sources.

To achieve greater efficiency in monitoring compliance with legal requirements, we are developing software to record the above information. The aim of the application is to make it easier to control and at the same time to perform the passporting of water works.

Before starting construction work, we place emphasis on the respecting of the conditions applicable in the protection zones of water sources, natural curing and inundation areas. In accordance with the principle of water retention in the landscape, we prefer the absorption of rainwater rather than the regulated discharge into a combined sewerage system.

2.2.4 Air protection
Within the framework of our obligations in the area of air protection, arising in particular from the Act No. 201/2012 Coll., on Air Protection, we strive to prevent air pollution beyond the relevant legal framework.

The activities related to air protection in the conditions of Správa železnic consist of the following set of specific measures, optimised from the environmental, economic and social points of view:
- Elimination or at least minimisation of negative effects on human health resulting from air pollution by pollutants;
- Elimination or at least minimisation of the adverse impacts of air pollution on the natural environment;
- Fulfilment of the requirements arising from the current, newly adopted and forthcoming Czech and European legislation in the field of air quality assessment and management and related areas;
- Monitoring and reduction of the total air pollution load and the quantities of individual types of emissions produced by stationary sources of air pollution;
- Proposals for measures to reduce the air pollution produced and control of their implementation;
- Renewal and rationalisation of thermal sources of air pollutants using adequate alternatives;
- Renewal and rationalisation of air conditioning systems with emphasis on the prevention of leakage and the protection of the climate

and of the ozone layer;
- Gradual elimination of asbestos-containing materials in the buildings of Správa železnic.

In order to be able to comply with the declared measures, we are gradually replacing sources featuring a higher emission load with low-emission sources which comply with the emission classes 4 and 5 according to ČSN EN 303-5. We also prefer cleaner fuels such as natural gas and we increase the share of energy obtained from renewable sources.

For illustrative purposes, we provide an overview of the composition of energy sources in the total registered number of approximately 3,100 sources in the attached Chart 5. It clearly shows that gas-fired sources are overwhelmingly predominant types of facilities.

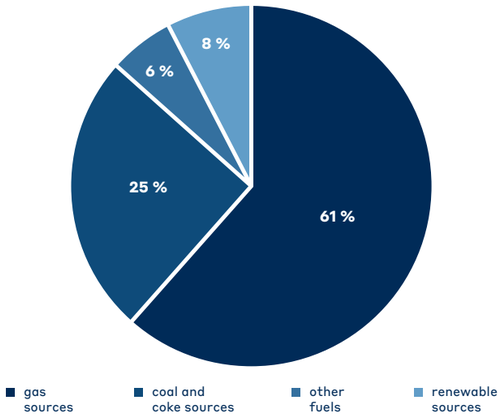


Chart 5. *Overview of the composition of energy sources in the total registered number*

In addition, Správa železnic implements, on an ongoing basis, construction and technical surveys of buildings with a focus on the presence of asbestos. The subject matter is a visual inspection of the available space, combined with sampling and sample analysis. The extent of occurrence and the identified hazardousness of asbestos materials are incorporated into detailed Inspection Reports and a comprehensive Asbestos Register, which primarily serve as background material for planned renovations and repairs of these facilities. The removal of this hazardous material is carried out within the framework of the aforementioned construction works as well.

2.2.5 Protection of public health against noise and vibration

Noise and vibrations originating from railway transport are undesirable phenomena affecting mainly the population living near the railway. Therefore, an integral part of the renovation and modernisation of railway lines is the installation of anti-noise or anti-vibration measures. The scope of these measures is then determined primarily by the need to reduce noise or vibration to such an extent that the hygienic limits set by Government Regulation No. 272/2011 Coll., on the protection of health against the adverse impacts of noise and vibration, are not exceeded. To eliminate vibrations, so-called anti-vibration mats are used, which are inserted into the construction of the railway substructure. The most widely used noise protection measure is the noise barrier wall, which is the most effective measure in terms of efficiency. In the case where a noise barrier wall cannot be installed, e.g. due to landscape disturbance, limited space conditions or to ensure railway safety (typically near level crossings where maintaining sight lines is essential), the possibility and effectiveness of alternative noise abatement methods are investigated. Of these, rail absorbers, installed directly on the rail head rest, are now commonly proposed, but they can only be expected to reduce noise by about 2 dB (whereas PHS can achieve noise reductions of up to 15 dB, depending on its height and the conditions of the location of the development relative to the line). In the case of single-track lines, a so-called low noise barrier can alternatively be installed in the immediate vicinity of the track, which has an effectiveness comparable to that of a noise barrier wall. For multi-track lines, the effectiveness of low noise barriers is low and their use here only makes sense in specific cases. If the necessary noise reduction cannot be achieved by track-side measures, individual noise protection measures are implemented directly on the noise-affected buildings. The choices of specific noise reduction measures or right combinations of measures depend primarily on the required level of noise reduction, local operational conditions and the results of discussions with representatives of the affected municipalities.

One of the recent innovations to minimise the height of classical noise barriers is the Swedish Wavebreaker noise barrier system. These are modular extension pieces fixed to the top edge of the noise barrier. Správa železnic was the first railway operator to permit a trial installation of this system on an operated railway corridor line. The future use of this system will be the subject matter of a more general discussion and further development.

As a part of routine maintenance, rail grinding is carried out to eliminate noise build-up as a consequence of the rail wear and tear.

In addition to the above-mentioned noise reduction measures, which are of a technical nature, the reduction of noise from rail transport is also gradually being achieved by organisational measures introduced in accordance with the European requirements for interoperability of the railway system.
These are incentive and restrictive instruments leading to the modernisation and renewal of freight wagons. In 2020 and 2021, a bonus was paid to freight operators for the use of modernised wagons where cast iron brake blocks were replaced by composite blocks.
In addition, from 8 December 2024, the so-called ‚quieter lines' will be introduced where only freight wagons meeting the requirements for noiseless wagons will be allowed to enter. The measure will apply to all lines with high freight traffic volumes, a list of which can be found in the Network Statement 2025.

We also place appropriate emphasis on the correct assessment of railway transport noise, as it is in many ways specific unlike other noise sources. To this end, we apply our own manual for the preparation of noise studies and measurements of railway transport noise, which is followed by our design work contractors. We also require a proper assessment of the noise load during negotiations of new constructions by foreign investors in the area of the railway protection zone to avoid increasing the number of people affected by excess noise from railway transport.

Overview of implemented noise protection measures	2022	2023
Noise barrier walls	8,055 m	3,103 m
Low noise barriers	0	485 m
Rail absorbers (double-track line section length)	0	170 m
Individual noise protection measures (number of buildings treated)	6	1
Rail grinding for the purpose of noise reduction (track length)	57,398 m	16,079 m

Table 2. *Overview of implemented noise protection measures*

2.3 We are the driving entity of the green transformation of railway

We are continuing the line electrification of the Czech railway network on an ongoing basis. In the last 17 years, 287 km of railway lines have been newly electrified.

Line number	Railway line / line section	Operation beginning year	Length (km) – rounded
140	Kadaň-Prunéřov – Karlovy Vary	2006	47.0
321	Ostrava-Svinov – Opava východ	2006	28.5
323	Ostrava hl. n. – Ostrava-Kunčice	2007	11.0
024	Letohrad – Lichkov state border	2008	23.6
199	České Velenice state border – České Budějovice	2009	50.7
248	Znojmo – Šatov state border	2009	11.0
291	Zábřeh na Moravě – Šumperk	2010	14.2
232	Lysá nad Labem – Milovice	2010	5.9
279	Studénka – Sedlnice – Mošnov	2014	6.5
251	Hrušovany u Brna – Židlochovice	2020	3.0
134	Louka u Litvínova – Litvínov	2021	1.5
254	Šakvice – Hustopeče u Brna	2021	7.6
240	Brno-Horní Heršpice – Střelice	2021	13.1
290	Olomouc – Uničov	2022	29.2
143	Kadaň-Prunéřov – Kadaň suburb	2022	5.4
290	Libina – Uničov	2022	14.3
290	Šumperk – Libina	2023	14.3
Total			**286.8**

Table 3. *Overview of line electrification in 2006-2023*

2.3.1 Development plans for line electrification

In 2020, Správa železnic commissioned at the Transport Research Centre in Brno an expert quantification of the potential for CO_2 emission reductions and of the energy savings due to the implementation of AC power supply system (AC 25 kV, 50 Hz) electrification of the railway lines on a selected railway network, which should include, by 2030, more than 120 railway lines. One of the important advantages of electric traction compared to diesel traction is the potential for significant energy savings through the use of energy recovery (about 5-10 % for freight transport, between 10-40 % for passenger transport). Another indisputable advantage is the possibility of transmission of high outputs, which is to play a very important role in the case of the expected intermodal shifts in freight transport from road to rail. Last but not least, there are benefits of up to several times lower CO_2 emissions, which are set to continue in their decreasing trend in the foreseeable future on the basis of a constantly improving energy mix and high efficiency of electric motors.

The most promising railway lines to be electrified in terms of CO_2 savings (related to 2030) are the line No. 071 Mladá Boleslav – Nymburk with a total saving of up to 185 t CO_2/km and the line No. 021 Týniště nad Orlicí – Častolovice – Solnice with savings up to 180.4 t of CO_2/km. A complete overview is provided in Table 6. A significant role is played here by the large transport outputs related to the transport of passenger cars. Other railways with a high potential for CO_2 savings include e.g. line No. 323 Ostrava-Kunčice – Frenštát pod Radhoštěm, where passenger transport will save up to 80 % due to very strong suburban traffic. A surprising result may be the line No. 093 Kladno – Kralupy nad Vltavou, which, unlike the above-mentioned lines, does not yet have an approved feasibility study. Due to its strategic location, which allows bypassing the Prague railway junction in the west-north direction, it is very suitable for the future routing of freight transport. In the case of electrification, it could be used for transporting aviation gasoline for Prague airport or limestone to the North Bohemian coal-fired power plants.

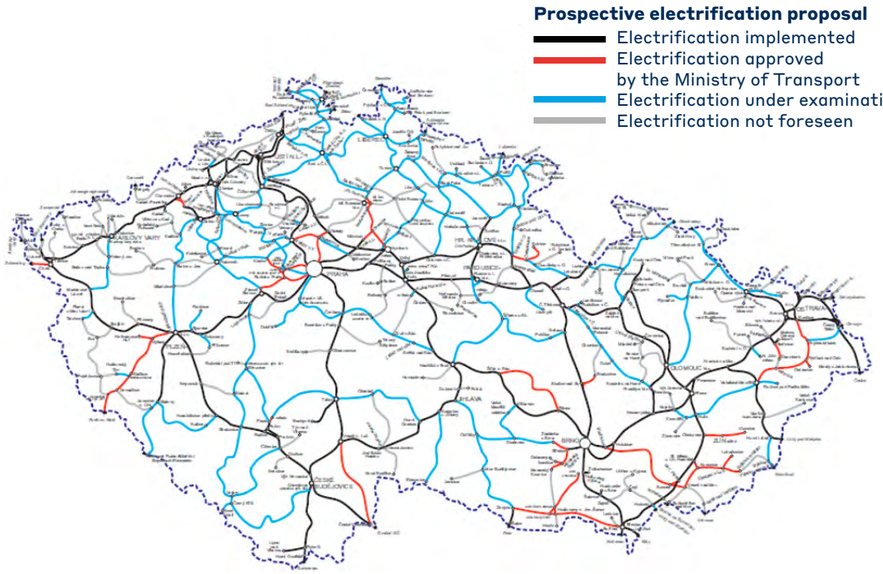


Figure 4. *Prospective electrification proposal (January 2023)*

The potential to reduce production of CO_2 emissions does not arise only due to electrification itself and consequently more economical operation of railway transport, but also due to the increased attractiveness of railway transport through electrification, a shift of a part of road transport to railways is expected. The study therefore counts on a 15 % increase in railway transport output on all railway lines except for those on which an individual increase in freight transport output is defined. The total increase on all railway lines analysed thus amounts to 657.9 million gross tonne kilometres ("grtkm") by 2030. It is possible to suppose that this volume of traffic will be shifted from roads to railways, thereby saving 0.95 % of the CO_2 emissions produced by heavy road freight transport.

Railway line/section	Energy consumption (D) (2030) [kWh]	Energy consumption (E) (2030) [kWh]	Energy savings [%]	Emissions (D) (2030) [t]	Emissions (E) (2030) [t]	Emission savings [%]	Emission savings [t/km]	Average recovery savings [%]	Financial energy and emission savings [CZK mil.]	Electrification costs [CZK mil.]
Olomouc – Uničov – Šumperk	15,396,786	5,262,161	65.8	3,888	2,333	40.0	27.3	22	32	1,373

Table 4. *Completed construction projects in the year 2023*
(Data source: study by the Transport Research Centre (CDV): Options for reducing CO_2 emissions due to implementation of the line electrification, 2020)

Railway line/section	Energy consumption (D) (2030) [kWh]	Energy consumption (E) (2030) [kWh]	Energy savings [%]	Emissions (D) (2030) [t]	Emissions (E) (2030) [t]	Emission savings [%]	Emission savings [t/km]	Average recovery savings [%]	Financial energy and emission savings [CZK mil.]	Electrification costs [CZK mil.]
(Brno--Horní Heršpice) Střelice – Zastávka u Brna	16,818,333	5,201,119	69.1	4,247	2,306	45.7	84.4	25	36	184
Praha--Bubny – Kladno	15,669,259	5,403,152	65.5	3,957	2,396	39.5	50.4	21	32	248

Table 5. *Ongoing construction projects in the reporting period 2023*
(Data source: study by the Transport Research Centre (CDV): Options for reducing CO_2 emissions due to implementation of the line electrification, 2020)

Railway line/ section	Energy consumption (D) (2030) [kWh]	Energy consumption (E) (2030) [kWh]	Energy savings [%]	Emissions (D) (2030) [t]	Emissions (E) (2030) [t]	Emission savings [%]	Emission savings [t/km]	Average recovery savings [%]	Financial energy and emission savings [CZK mil.]	Electrification costs [CZK mil.]
Častolovice – Solnice	8,788,708	2,776,930	68.4	2,220	1,231	44.5	65.9	18	19	120
Častolovice – Týniště nad Orlicí	7,500,155	2,206,572	70.6	1,894	978	48.3	114.5	30	16	293
Praha-Vysočany – Neratovice	17,593,522	5,326,315	69.7	4,443	2,362	46.8	74.3	25	38	453
Neratovice – Všetaty	3,598,645	1,031,870	71.3	909	458	49.7	75.2	30	8	506
Mladá Boleslav – Nymburk hl. n.	54,285,278	18,399,280	66.1	13,709	8,158	40.5	185.1	17	113	469
Cheb – Cheb state border	3,046,351	942,900	69.0	769	418	45.7	31.9	25	7	88
Plzeň hl. n. – Domažlice	32,676,268	11,272,557	65.5	8,252	4,998	39.4	55.2	17	67	839
Domažlice – Česká Kubice state border	3,615,293	1,236,270	65.8	913	548	40.0	24.3	22	7	212
Písek – Písek město	386,687	116,159	70.0	98	52	47.3	11.5	27	0.8	32
Boskovice – Skalice nad Svitavou	1,226,912	418,686	65.9	310	186	40.1	24.8	24	2.54	40
Kojetín – Hulín	3,897,596	1,559,475	60.0	984	691	29.8	17.2	7	8	136
Frýdlant nad Ostravicí – Frýdek Místek	26,104,157	8,519,655	67.4	6,592	3,777	42.7	117.3	22	55	249
Frýdlant nad Ostravicí – Ostravice	1,323,671	438,303	66.9	334	194	41.9	20.0	23	2.8	113
Frýdlant nad Ostravicí – Valašské Meziříčí	15,602,848	5,605,083	64.1	3,940	2,485	36.9	36.4	22	32	377
Štramberk – Sedlnice	3,231,012	1,026,686	68.2	816	455	44.2	25.8	24	7	112
Otrokovice – Vizovice	8,212,346	2,784,235	66.1	2,074	1,234	40.5	33.6	19	17	200
Veselí nad Moravou – Blažovice	4,763,163	1,485,417	68.8	1,203	659	45.2	7.8	22	10	789
Kojetín – Hulín	3,897,596	1,559,475	60.0	984	691	29.8	17.2	7	1	136
Veselí nad Lužnicí – České Velenice	19,787,037	6,418,363	67.6	4,997	2,846	43.1	39.1	26	7	440
Chomutov – Březno u Chomutova	2,296,939	723,293	68.5	580	321	44.7	23.6	28	1	88
Heřmanova Huť – Nýřany	489,170	167,564	65.7	124	74	39.9	4.9	36	0.2	80

Table 6. *Railway lines with an approved electrification feasibility study*
(Data source: study by the Transport Research Centre (CDV): Options for reducing CO_2 emissions due to line electrification, 2020)

2.3.2 Unification of the traction power supply system to AC 25 kV, 50 Hz

Most of the railway lines which feature great potential for energy and CO_2 emission savings due to electrification are currently electrified with a direct-current system (DC 3 kV). Their electrification must therefore in many cases first be preceded by the conversion of this network to the alternating-current power supply system (AC 25 kV, 50 Hz). A comparison of the existing 3 kV DC system with the proposed single 25 kV AC, 50 Hz system shows that the losses incurred will be up to 40 % lower if conventional transformers are used to power the alternating-current system. However, the stricter legislation will probably require the installation of static frequency converter (SFC) technology in some new power supply points to avoid adverse impacts on the supervisory power supply system due to non-compliance with the conditions for the load symmetry. Another significant benefit of the use of a static frequency converter is the avoidance of interfering current harmonics from the 25 kV, 50 Hz AC traction system to the supervisory power supply system.

Calculation of energy savings (in MWh/year) and CO_2 savings

For calculation of energy savings, it is necessary to use the comparison of the losses of the two power supply systems:

- The value of the losses increased after implementation of the conversion with the 25 kV AC, 50 Hz power supply system is 41,437 MWh/year.
- The total value of losses of the 3 kV DC system is 111,222 MWh/year.
- The difference in the value of losses after implementation of the conversion will be 69,785 MWh/year.

In addition, the calculated energy savings must be increased by the value of the recovered electricity transferred to the supervisory distributors' network by 4,630 MWh/year. The total energy savings plus the potential for recovery are therefore 74,415 MWh/year. This sum then represents the base value for the final calculation of CO_2 emission savings.

The specific carbon footprint of the electric energy corresponds to the expected energy mix for 2030, the value of which is set at 0.443 kg/kWh. The resulting annual CO_2 emission savings due to the change in the traction system is 0.443 x 74,415 = 32,966 tonnes of CO_2 per year.

The calculations show that implementation of the conversion on a network with a total length of 1,803 km to the single 25 kV AC, 50 Hz system will contribute to a reduction of CO_2 emissions in a total value of 32,966 t/year. This is mainly due to the lower energy demands under the existing conditions of operation of the railway transport, including the benefit of more efficient use of the recovered energy.

Total CO_2 emissions from transport in the Czech Republic amount to about 19,000,000 t/year. Their reduction by 32,966 t/year due to the unification of the traction power supply system to 25 kV AC, 50 Hz on the railway network would represent a decrease of total CO_2 emissions from transport by about 0.17 %.

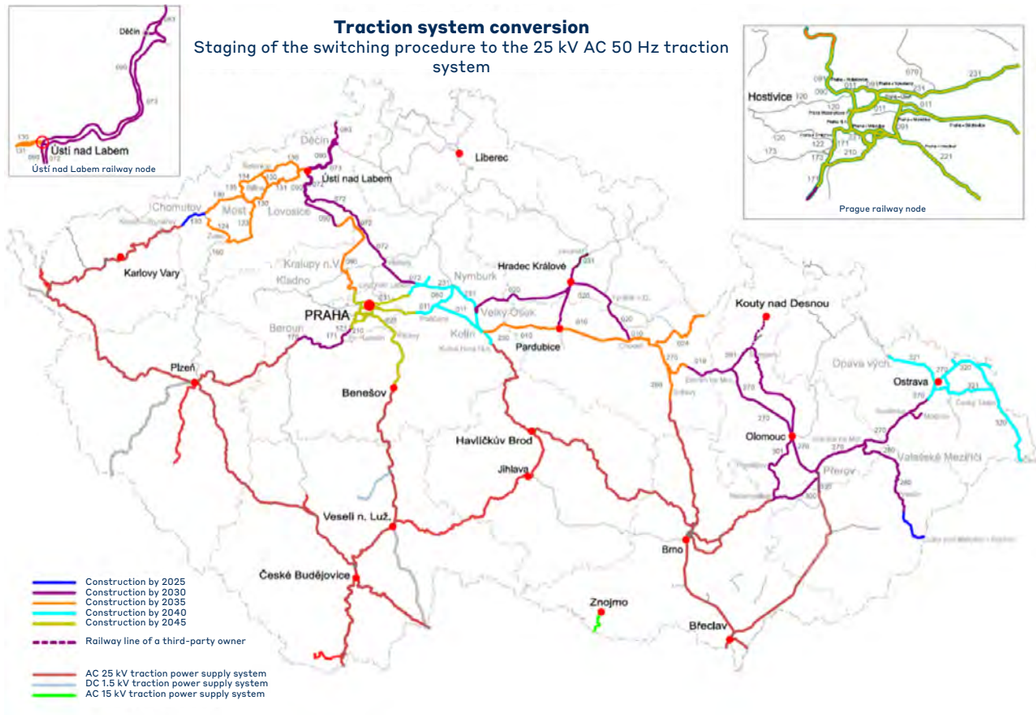


Figure 5. *Unification of the traction power supply system to AC 25 kV, 50 Hz*

Pilot project with converter technology for the 25 kV AC, 50 Hz traction system in the Nedakonice – Říkovice section

In connection with the transition of the 3 kV DC traction power supply system to the 25 kV AC system with a frequency of 50 Hz, Správa železnic is building up new traction substations (TNS) in the Czech Republic. With the use of new trends and efficient technologies, the TNS with converter technology (SFC) was implemented as the first European application for a 25 kV system with a frequency of 50 Hz within the framework of the pilot project Change of the Traction System to 25 kV AC, 50 Hz in the Nedakonice – Říkovice Section. The actual implementation of the SFC technology was preceded by more than four years of analysis, preparation and selection of the technical solution for SFC by the Electrical Engineering and Power Engineering Department in cooperation with experts from e.g. Australia, Switzerland, Germany or France. These are a total of three SFC technologies from ABB (now Hitachi Energy), two of which are installed at TNS Otrokovice on 22 kV busbars (distributor EG.D, a.s.) and one at TNS Říkovice on 110 KV busbars (distributor ČEZ Distribuce, a.s.). In 2023, the sections Říkovice – Hranice na Moravě, Střelná state border – Vsetín and Vsetín – Hranice na Moravě were under preparation.

Green railway – sustainable mobility

3.1 We improve energy performance of buildings and railway stations

The most significant energy saving projects implemented by Správa železnic have a key impact on improving energy efficiency and also lead to the fulfilment of the energy policy commitments and energy strategy objectives of Správa železnic. For all energy saving measures, the overall reduction in energy consumption and operating costs as well as CO_2 emission savings are identified and evaluated.

3.1.1 Replacement of lighting in railway stations with LED technology

The development of the replacement of conventional lighting (sodium and mercury discharge tubes) with LED technologies with the identification of energy and economic savings, including CO_2 emission reductions, has been monitored since 2015. The following tables show the positive development of the gradual installation of LED lighting at railway stations and stops, where a continuous decrease in electricity consumption, costs and CO_2 emissions can be observed.

	Power input of original luminaires (kW)	Power input of LED (kW)	Savings (kW)	Savings (%)	Number of original luminaires (items)	Number of LED luminaires (items)	Difference LED / original (items)	Electric energy savings (MWh)	Cost savings (CZK)	CO_2 savings (t)
2022	519	263	255	49	2,252	2,767	515	1,031	5,195,340	421
2023	498	199	298	60	2,454	2,669	215	1,190	5,404,440	440

Table 7. *Overview of power inputs, electricity savings, costs and CO_2 emissions in 2022 and 2023*

Period	Electric energy savings (MWh)	Cost savings (CZK)	CO_2 savings (t)
2015–2017	1,609	4,826,034	785
2018–2020	2,981	9,485,691	1,237
2021	957	3,446,496	373
2022	1,031	5,195,340	421
2023	1,190	5,404,440	440
Total	**7,768**	**28,358,001**	**3,256**

Table 8. *General overview of savings of electric energy, costs and CO_2 for 2015–2023*

3.1.2 Energy savings of renovated buildings and new constructions

For renovations, emphasis is placed on appropriate insulation of the building cladding system, replacement and renovation of windows and doors, replacement of the source for heating, cooling or hot water preparation, including distribution systems and the use of measurement and control systems. The replacement of interior and exterior lighting with LED technology includes the installation of motion sensors and daylight-dependent artificial lighting control systems. There is also utilisation of forced ventilation systems with waste heat recovery, the installation of efficient renewable energy sources (heat pumps, PV, thermal solar systems), as well as the introduction of energy management (metering and remote energy readings, installation of thermoregulating valves, etc.).

At the same time, existing buildings in poor technical condition are being replaced with new buildings or entire sites under the current strict legislative conditions. Appropriate Czech and EU subsidy programmes or other co-financing methods are used to co-finance energy saving measures. For these buildings, the savings generated by the reconstruction are quantified in detail on the basis of the energy performance documents prepared (energy assessments, environmental assessments, etc.). The energy-saving measures implemented in the period 2017-2022 will save approximately 6,300 MWh of energy and 2,200 tonnes of CO_2 per year. The following Tables 9 and 10 below list the passenger station buildings the renovations of which have been completed or are undergoing refurbishment in 2023.

Location	Consumption savings MWh/year	Total energy savings	CO_2 savings t/year	CO_2 savings	Implementation period
Renovations completed in 2023					
Moravský Beroun	460	84 %	153	84 %	2/2021-3/2023
Opava západ	654	66 %	224	54 %	3/2021-9/2023
Písek	157	70 %	31	37 %	1/2021-10/2023
Chodov	248	90 %	52	86 %	8/2022-12/2023
Tachov	43	35 %	15	55 %	6/2021-11/2023
Kravaře	107	61 %	22	57 %	9/2022-12/2023
Bílina	78	43 %	34	32 %	10/2022-12/2023
Benešov nad Ploučnicí	23	16 %	9	9 %	10/2022-12/2023
Aš	530	95 %	74	67 %	10/2022-12/2023
Bystřice (Bystrzyca)	57	21 %	14	21 %	11/2022-8/2023
Pardubice, 1st stage	201	16 %	84	17 %	12/2020-12/2023
Ostružná	110	71 %	36	71 %	9/2022-11/2023
Sokolnice-Telnice	120	56 %	28	52 %	9/2022-12/2023
Karviná	320	73 %	141	74 %	11/2022-12/2023
Teplice v Čechách, 1st stage	23	9 %	4	2 %	8/2022-12/2023
Renovations taking place in 2023					
Beroun	605	46 %	65	20 %	8/2020-3/2024
Planá u Mariánských Lázní	232	71 %	53	72 %	4/2021-3/2024
Plzeň hl. n.	520	40 %	115	12 %	4/2021-3/2024
České Budějovice	463	23 %	151	23 %	6/2020-4/2024
Světlá nad Sázavou	31	23 %	114	81 %	10/2022-3/2024
Krásná Lípa	122	38 %	58	49 %	11/2022-7/2024
Senice na Hané	47	55 %	8	42 %	12/2023-8/2024
Total	**5,151**	**X**	**1,485**	**X**	

Table 9. *Overview of energy and CO_2 savings generated by renovations – completed 2023 or ongoing*

The following Table 10 shows the station building refurbishment projects which were at an advanced stage of project preparation in 2023.

Location	Consumption savings MWh/year	Total energy savings	CO_2 savings t/year	CO_2 savings
Tábor	328	61 %	105	56 %
Jihlava	328	46 %	156	41 %
Bečov nad Teplou	19	16 %	93	53 %
Hlinsko v Čechách	12	9 %	11	23 %
Valšov	25	49 %	34	60 %
Plzeň-Jižní Předměstí	50	17 %	17	23 %
Jindřichův Hradec	165	46 %	31	39 %
Nepomuk	99	47 %	19	34 %
Hlučín	25	31 %	14	55 %
Chuchelná	118	77 %	25	76 %
Jindřichov ve Slezsku	224	88 %	65	77 %
Čáslav	88	82 %	89	82 %
Františkovy Lázně	141	32 %	39	32 %
Lovosice	346	44 %	175	38 %
Kopřivnice	228	72 %	19	51 %
Velká Bystřice	147	82 %	36	86 %
Ostrava-Vítkovice	108	64 %	93	64 %
Jaroměř	409	63 %	56	22 %
Klatovy	496	37 %	56	15 %
Total	**3,356**	**X**	**1,133**	**X**

Table 10. *Overview of energy and CO_2 savings generated by renovations – preparation*

3.1.3 EPC projects

The EPC programme was created to achieve the objectives set out in the European Green Deal and the National Action Plan for Clean Mobility in the Czech Republic. One of the methods of implementation and financing is the so-called EPC (Energy Performance Contracting), where the project is only paid back from the savings generated. Správa železnic selected the following objects for pilot testing in the form of EPC: Benešov u Prahy, Benešov nad Ploučnicí, Krásná Lípa. We expect this method of financing projects to gradually contribute to the saving of financial resources, to the reduction of energy consumption and to the future implementation of the Energy Strategy of the Czech Republic.

3.2 We install photovoltaic power plants

3.2.1 PV power plants on the roofs

The use of PV as an efficient renewable energy source (RES) is an important point for Správa železnic in terms of implementing the energy strategy. In view of the development of new technologies, legislative requirements for reducing the carbon footprint and increasing the energy self-sufficiency of buildings, we are placing great emphasis on the investigation of installations of these technologies on the roofs of buildings.

In the advanced stage of project preparation or implementation, PV power plants are under construction in 28 locations under the 1st wave of applications – RRF the in D+B mode. In Wave 2, PV power plants are proposed in additional 27 locations.

In December 2023, the project Design of Priority and Suitable Properties of Správa Železnic for the Installation of PV Power Plants with an Installed Capacity of over 50 kWp and over 100 kWp was launched. The project will assess approximately 300 properties which are suitable for the installation of PV power plants.

3.2.2 PV power plants on the brownfields

In the projects of renovation of railway stations and infrastructure Správa železnic examines unused plots of land, which could be used for installation of PV systems. The green electricity generated will be primarily supplied to the LDSž (Local distribution system of Správa železnic). PV power plant installations are being investigated within the framework of both capital expenditure projects and for as yet unused brownfield sites. In the first wave we are screening PV power plant installations on 18 brownfield sites. This is the first phase of monitoring the potential for PV power plants on Správa železnic's land and we plan to expand it further.

3.3 We contribute to the development of e-mobility and multimodality

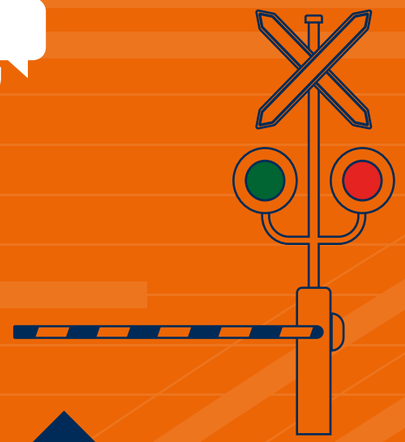
Transport accounts for a quarter of the greenhouse gases produced in the EU and this share is still growing. To achieve climate neutrality by 2050, transport emissions need to be reduced by 90 %. Individual car transport must also contribute to this. That is why there is already a significant increase in the share of electric vehicles on the road. One of the key documents is the European Green Deal strategy which has also been adopted by the Czech Republic. In order to implement it, it is necessary to change the policy on clean energy supply throughout the entire economy. In order to implement this policy in cities, we have a strategic objective consisting in taking part in the building up of the infrastructure for charging electric vehicles and thus interconnecting individual passenger car transport and public railway transport. According to current legislation, Member States should ensure that at least one charging station and cable ducts are installed for at least every fifth parking space in new and substantially renovated non-residential buildings with more than ten parking spaces, in order to enable the installation of charging stations for electric vehicles at a later stage.
This is required in cases where:

a) the parking area is located inside the building and major renovation measures also affect the parking area or the building's electrical distribution systems; or
b) the parking area is physically adjacent to the building and major renovation measures also affect the parking area or the parking area's electrical wiring.

For this purpose, a document called Infrastructure Development Plan for Electric Vehicle Charging was prepared by Správa železnic, the content of which is the concept and strategy of public parking areas with a certain number of charging stations and their sufficient capacity at railway stations and stops.

On the basis of the signed Framework Agreement on Leases of parts of land for the purpose of installation and operation of charging stations for electric vehicles between Správa železnic and ČEZ, a.s., charging stations are already envisaged in the project phases. Parking spaces with charging stations are already prepared in Vsetín as a part of the implementation of the parking house of Správa železnic, where 2xAC and 2xDC charging stations should be located. The opening of the terminal Vsetín is planned in 2024. Other locations where construction readiness has already been carried out or is foreseen in the project are, for example: the Dlouhá Míle Terminal, the construction of the new main railway station in Brno, Benešov nad Ploučnicí, Chodov, Aš, České Budějovice, Písek, Nýřany, Lovosice, Františkovy Lázně and Most. Other locations are being investigated within the framework of upcoming projects.

Social, Safety, Security



SAFETY FIRST

The activities of Správa železnic have a significant impact on society, both outside and inside the organisation.

Správa železnic therefore makes every effort to ensure that its activities bring benefits everyone.

Together as a Team

Employees are the main force of our organisation and without them Správa železnic could not exist.

Our responsibility inside the organisation is fulfilled by our approach towards them.

Within the framework of health promotion, employees are, for example, entitled to fitness stays in Czech spa facilities. In addition, we regularly educate our employees, not only in our internal regulations, but we also try to develop their creativity and transferable competences as much as possible.

Equal Opportunities

Equal opportunities for all our existing employees as well as potential employees are an important component; together with our European partners, we are a part of the agreement of the social partners in the railway sector (CER and ETF) – Women in Rail.

SAFETY FIRST

Safety is a key element of our work for the society.

Every day, we ensure the safety of railway transport, which also improves its comfort.

By introducing track safety systems, ETCS signalling systems, increasing the safety of level crossings, implementing a prevention system, ensuring cyber security and a number of other partial changes, we support the development of the entire railway network on the territory of the Czech Republic on a long-term basis.

- TRACK SAFETY
- KOMFORT DOPRAVY
- TRANSPORT COMFORT
- RELIABLE LEVEL CROSSINGS
- ETCS AND THE PREVENTION SYSTEM

Transport safety

4.1 We operate the rail system in a safe way

We are investing heavily in the infrastructure development to improve the safety of rail operations. Modernisation includes, among other things, the deployment of GSM-R and ETCS. We are also focusing on increasing safety at level crossings, which are statistically the riskiest places in terms of occurrence of incidents. In the area of safety prevention, we are implementing safety campaigns and a range of other projects. Their aim is to promote prevention and education in the field of railway safety, to acquaint the public of all age categories with the rules of behaviour in the vicinity of the tracks and at the same time warn of the fatal consequences of not respecting these rules. We film preventive safety videos, organise workshops and thematic events. In the context of infrastructure, we focus mainly on the modernisation of transit corridors and other lines included in the TEN-T system, railway junctions and the modernisation of other lines included in the European railway system. We have also focused on speeding up the passage through some railway junctions. In the long term, we are working to ensure interoperability of selected lines, primarily through the construction of the GSM-R digital radio system. The deployment of the GSM-R and ETCS systems within the framework of European standards is carried out according to the ERTMS implementation plan. The ETCS system has already been applied on a number of backbone lines, and other line sections are under implementation or in preparation. ETCS stress tests are currently being carried out on individual sections, which will be transferred to exclusive operation from 1 January 2025. In parallel, measures are being implemented to increase the reliability of the ETCS system. In addition to replacing the railway superstructure and improving level crossing safety, the capital expenditure aimed at repairing the railway infrastructure included also repairs of platforms and lighting of stops, bridges and culverts.

4.1.1 Level crossings

In the previous period, the level of safety at level crossings continued to be intensively improved. In 2022, altogether 233 level crossings were reconstructed and modernised thanks to capital expenditure activities, in 2023 the reconstruction projects concerned another 124 level crossings. In the following years we would like to continue the rapid pace of their modernisation, in 2024 alone we expect to reconstruct or modernise at least 100 level crossings. This is based on the government's programme declaration to modernise 500 level crossings by 2025.

One of the ways to improve safety is by removing or replacing level crossings. Level crossings are either abolished through capital expenditure activities or through administrative procedures initiated by the regional directorates of Správa železnic at road administrative authorities. The process of removing level crossings is always very individual, it is not implemented in a mass way. On the contrary, any possible cancellation or replacement must be duly discussed with all the stakeholders concerned. Our aim is always to agree terms with the owners and users of the roads in question. The examination of the possibility of cancelling selected level crossings, including the determination of the relevant administrative procedures, follows from the legislation in force. Therefore, verification of the need for a level crossing does not automatically imply its cancellation. The reduction in the number of crossings occurs on underused roads (especially on dirt and forest roads) where there is a possibility of using an adequate and legally acceptable detour route or building an alternative communication.

In 2023, altogether 61 level crossings were cancelled, of which 19 were cancelled within the framework of capital expenditure activities and 42 on the basis of cancellation requests filed at the road administration authorities. In the upcoming period, we anticipate the cancellation of dozens more level crossings.

The amendment to the Act No. 13/1997 Coll. on Roads has been very useful in its effort to cancel underused level crossings. In particular, the statutory conditions and rules for discussing the cancellation of level crossings have been clarified.

As at 31 December 2023, there were 7,580 level crossings on the railway network.

4.1.2 Safety management

We hold the Railway Operator's Safety Certificate (Safety Approval, number CZ2120230001), valid till 13 May 2028. The safety approval certifies the recognition of a railway undertaking's safety management system in the European Union in accordance with Directive (EU) 2016/798 and applicable national legislation.

We are also a holder of the Railway Undertaking´s Certificate (Single Safety Certificate, number CZ1020230082), valid until 7 April 2028. This certificate confirms the approval of the safety management system (SMS) of the railway undertaking, including the measures taken by the railway undertaking to meet the specific requirements necessary for the safe operation of the relevant network(s) in accordance with Directive (EU) 2016/798 and applicable national legislation.

The safety system for the operation of railways as well as railway transport is ensured at Správa železnic in all the areas of activities affected by the operation of nationwide and regional railways, as can be seen in the following Figure no. 4.

Figure 6. *Railway operation safety system and railway transport operation*

In 2012, the Department of Rail Operation Safety System (O18) introduced a quality management system in accordance with the ČSN EN ISO 9001:2008 standard, which it subsequently transformed in accordance with the requirements of the ISO 9001:2015 standard and underwent recertification and surveillance audits, during which it proved that the management system in the organisation complies with the requirements of the standard. The audits further showed that the effectiveness of the management system is effective and that the system is correctly maintained in accordance with generally applicable standards and regulations, and that the related documentation is controlled. The implementation of the quality management system is focused on three main processes – identifying the causes and circumstances of incidents, investigation of fatal and specified work accidents and assurance of the railway operation safety system and railway transport.

The O18 Department holds an ISO 9001:2015 certificate, which proves that it has a quality management system in place and that it applies this system effectively.

No deficiencies have been found in the railway operation safety system and railway transport operation at Správa železnic in the past years by the state administration supervisory bodies, which means that it is therefore up-to-date and fully functional.

The safety of railway operation and railway transport operation is consistently at a very high level, and the set safety targets are met. We continue to implement the European Deployment Plan and the National Implementation Plan for ERTMS/ETCS.

Safety management in our organisation is ensured by the top-level management, executive management is delegated to all management levels by the organisational structure and is ensured in accordance with the applicable regulatory provisions. Through a functional system of internal regulations, regular training and knowledge testing, it is ensured that every employee is aware of the importance of ensuring safety in the performance of their activities.

The requirements for the railway operation safety system and railway transport operation are described, at Správa železnic, in the document SŽ SMS Handbook Railway Operation Safety System and Railway Transport Operation of the State-owned Organisation ‘Správa železnic’. This document is drawn up in accordance with the requirements of Directive (EU) 2016/798 of the European Parliament and of the Council on railway safety, as amended, Act No. 266/1994 Coll., on rail systems, as amended, the methodology of the European Union Agency for Railways (ERA) issued in the form of guides (e.g. the guide for Safety Management System Requirements in Connection with Safety Certifications or Safety Approvals) and the methodological guidelines of the Rail Authority.

4.2 We are introducing the European Train Control System (ETCS)

4.2.1 ETCS

The deployment of ERTMS/ETCS in the Czech environment is triggering a change of concept in the approach and overall view of signalling and control equipment, especially in relation to traffic management and related professions. According to the EU 4th Railway Package, it is no longer possible to install non-interoperable elements on the EU railway network, including the railway lines of Správa železnic. In addition, within the framework of the update of the EU's approach to the TEN-T network, the approach to the existing national systems will be changed as well and deadlines for their removal from the railway network will be set. Therefore, we are already installing new systems, in particular signalling equipment and radio communication systems which are compatible with interoperable vehicles (ETCS, GSM-R and its future generational successor FRMCS).

Historically, the railway safety systems primarily developed based on national needs and practices were adapted to the local conditions of railway operation. The ETCS system requires adaptation of the existing infrastructure, changes in the regulatory framework and the introduction of new organisational and administrative procedures. We are actively involved in the development of this system and all its components at a European level.

This activity is underlined by the membership of Správa železnic in the ERTMS Users Group (as the first railway infrastructure manager from the former Eastern Bloc) and since 2023 also in EULYNX, which prepares uniform interfaces between various elements of the signalling and control equipment and other types of equipment, e.g. information systems supporting the traffic management activities.

We are primarily dealing with deployment of the ETCS system from the trackside point of view, however, being also a carrier, we already have vehicles equipped with mobile parts (Onboard Units – OBUs) of the ETCS and at the same time, we are in the process of equipping our other special powered vehicles with the ETCS system. With this installation, together with further planned purchases of new vehicles which are to include the mobile part of the ETCS system directly from the factory, we expect sufficient coverage of all railway lines with exclusive operation under the ETCS from 2025.

4.2.2 ETCS – trackside part

We are currently preparing the installation of the trackside part of the ETCS system at two levels. Primarily, we are focusing on the lines of European importance (TEN-T), where we are installing Level 2 ETCS based on a radio information transmission. We are also focusing on improving the safety of regional and less congested national lines with the so-called ETCS Regional. The trackside part of the Level 2 ETCS consists of a radio block centre and Eurobalises. The radio block centre monitors individual trains and communicates with them via the GSM-R digital radio system. For the trackside part of ETCS Regional, mainly switchable and non-switchable Eurobalises are used for communication with the train (working with the level 1 ETCS principles). In both variants, the ETCS system knows the position, direction of travel and speed of the trains and checks, in cooperation with the mobile part, whether the train driver is maintaining the speed and reacting correctly to the situation on the track. It is able to stop the train at the "Stop" signal and thus significantly increases safety on the railway compared to the current situation.

In 2023, the verification operation was taking place on the following sections with the ETCS trackside part:

- Petrovice u Karviné – Hrušky (outside);
- Česká Třebová (outside) – Brodek u Přerova;
- Plzeň (outside) – Cheb (outside);
- Český Brod – Praha-Malešice – Praha-Uhříněves;
- Praha-Uhříněves (outside) – Olbramovice, Votice district;
- Kolín – Česká Třebová – Adamov, Modřice – Břeclav – state border of the Czech Republic/Austria/Slovakia;
- Šakvice – Hustopeče;
- Hrušovany u Brna – Židlochovice;
- Ústí nad Orlicí – Lichkov;
- Beroun – Ejpovice a Beroun-Závodí;
- Uničov – Olomouc.

In 2023, the following construction projects were completed and put into verification operation:

- Votice – Nemanice;
- Cheb railway station;
- Brodek u Přerova – Přerov.

Sections with the performed ETCS Regional installation (ETCS STOP variant)

- Březnice (outside) – Blatná (outside);
- Blatná (outside) – Strakonice (outside);
- Nepomuk (outside) – Blatná (outside);
- Studénka (outside) – Bílovec;
- Frýdlant nad Orlicí (outside) – Ostravice;
- Temelín (outside) – Týn nad Vltavou

4.2.3 ETCS – onboard part (special powered vehicles - SPV)

The mobile part of the ETCS (OBU) consists mainly of a central computer (EVC) linked to the vehicle control system, GSM-R radio terminal for data communication, driver display and control unit (DMI), balise reader including an antenna, odometry system and recording unit. The mobile part performs the safety control of the vehicle's journey on the basis of data from the trackside part.

In 2023, projects to install mobile ETCS parts on several types of special powered vehicles (MVTV 2, MVTV 2.2, MVTV 2.3, MTW and MUV 75) continued to be implemented. These vehicles will be deployed from January 2025 for maintenance mainly on railway lines with exclusive ETCS operation. The newly acquired SPVs for maintenance and diagnostics will already include onboard ETCS parts from the production process (e.g. second series MTW SPVs, second series of new MUVs, new MVTVs or new SPVs for line diagnostics).

Security on railways

5.1 Security

Správa železnic is preparing to respond to and deal with incidents and crisis situations caused by natural or anthropogenic threats. It addresses the resilience of the organisation and the continuity of services provided to carriers, passengers and other customers using Správa železnic's services.

The ensuring of preparedness for dealing with crisis situations and continuity of services provided is systematically underpinned by the process continuity management system and the crisis management system.

In the area of crisis management and process continuity, methods are applied to evaluate, monitor and treat threats and risks arising from them in accordance with applicable legislation, standards and good practices. Within the framework of this process, Správa železnic prepares measures to reduce the level of adverse impacts on the organisation, its employees and its customers.

In cooperation with the IZS (Integrated rescue system), AČR (Army of the Czech Republic), NÚKIB (National Cyber and Information Security Agency) and carriers, we examine the procedures developed during joint drills and implement the knowledge gained during these exercises. We are also learning from past incidents and using the lessons learned to improve the railway's resilience.

We are also prepared to deal with emergencies in the transport of dangerous goods in accordance with the Regulations for the International Carriage of Dangerous Goods by Rail (RID). Správa železnic, as one of the participants in the transport of dangerous goods, pays great attention to this area and implements the obligations set out in the RID in its regulations, which are followed by its employees. In accordance with the RID, Správa železnic establishes safety rules and procedures in the event of emergencies in the transport of dangerous goods under the RID and puts them into practice.

Správa železnic integrates security measures, such as checks of premises in railway stations carried out by the Police of the Czech Republic, Municipal Police and guards of external security agencies, CCTV surveillance in railway stations and line sections, procedures for responding to incidents affecting the railway from the external environment, improves procedures for the protection of passengers, employees and carriers.

Správa železnic implements and develops the project of security of buildings and major railway stations by its own employees with the use of the latest technologies in the field of physical security and control of protected interests.

Within the framework of project preparation for renovation and construction of new buildings and technological facilities, security projects are created in order to set the optimal level of security of protected interests in buildings and in the railway transport route with the use of the most modern technologies.

Preventive measures reduce the likelihood of crimes which contributes to the overall feeling of security.

The integration of security aspects contributes to the creating of an environment of trust and safety for passengers, which is an important element of a sustainable and responsible approach to customers.

The assurance of safety of carriers and passengers reflects the social responsibility of the organisation while respecting and protecting the rights of passengers to security and protection.

Social and community relations

6.1 We are a responsible employer

After 20 years of its existence, when the organisation started its activities on 1 January 2003 with only 61 employees, it has become one of the largest employers in the Czech Republic and the largest ever in railway transport.

As at 31 December 2023, Správa železnic employed 16,893 employees working in 137 professions and in 18 organisational units (General Directorate of Správa železnic and 17 organisational units) operating throughout the Czech Republic.

6.1.1 Qualification and age structure of employees

The level of the qualification structure of Správa železnic's employees in 2023 has slightly increased compared to 2022. Employees with secondary education with a GCSE certificate predominated in number. In terms of the structure by the highest level of education attained, the share of employees with incomplete, primary and secondary education without a GCSE certificate totals 27.2 % (0.3 % decrease year-on-year), the share of employees with secondary education with a GCSE certificate totals 55.8 % (0.2 % year-on-year decrease) and the share of employees with higher vocational education and with a bachelor's, university or doctoral education totals 17.0 % (0.5 % year-on-year increase).

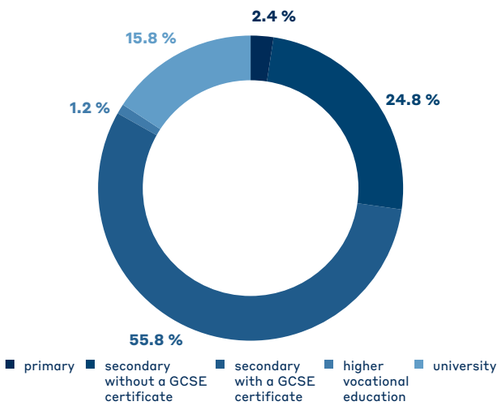
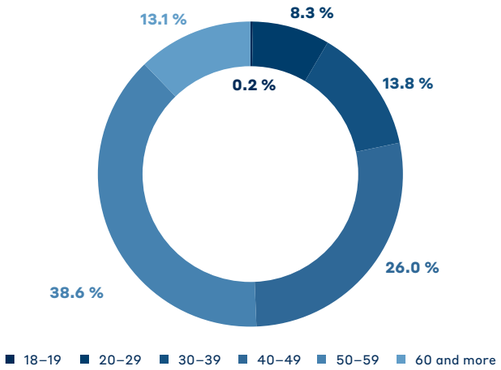


Chart 6. *Structure of employees by the highest level of education as at 31 December 2023*

The age structure of employees has not changed significantly on a year-on-year basis (see Chart 7), with the average age of a Správa železnic's employee as at 31 December 2022 being 48.53 years (year-on-year increase by 0.3 %).



Graf 7. *Age structure of employees as at 31 December 2023*

6.1.2 Ratio of men and women in Správa železnic

Railway transport is one of the most male-dominated sectors. This is confirmed by the continuing predominance of men, which on 31 December 2023 was 72.0 %.

Employees of Správa železnic	2022 as at 31 Dec. 2022	2023 as at 31 Dec. 2023
number of SŽ employees on the register	17,108	16,893
of which men	12,329	12,156
share in %	72.1 %	72.0 %
women	4,779	4,737
share in %	27.9 %	28.0 %

Table 11. *Employees*

When comparing 2023 with 2022, there is an increase in the proportion of women relative to men by 0.1 %.

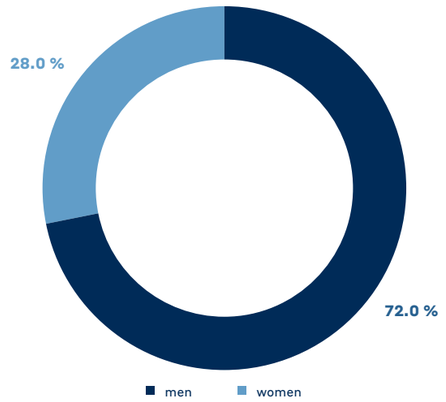


Chart 8. *Gender structure of employees as at 31 December 2023*

	Gender		2022 Total	Gender		2023 Total
Name of job position	M	F		M	F	
Train Dispatcher	2,246	1,143	3,389	2,177	1,125	3,302
System Specialist	1,181	953	2,134	1,212	998	2,210
Signaller	727	419	1,146	695	427	1,122
Track Maintenance and Repair Worker	1,092	33	1,125	1,076	30	1,106
Railway Infrastructure Electrician	784	4	788	794	4	798
Communication and Signalling Technician	728	8	736	717	9	726
Line Traffic Controller	312	48	360	352	62	414
Head of Department of an Organisational Unit	284	104	388	276	102	378
Switch Supervisor	142	251	393	136	201	337
Railway Transport Operator	22	307	329	26	293	319
Station Supervisor	199	105	304	186	151	337
Infrastructure Worker with Train Driver's Licence	309	0	309	302	0	302
Other job positions, total	4,303	1,404	5,707	4,207	1,335	5,542

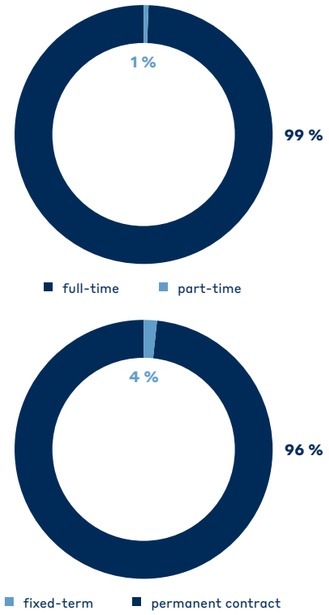
Table 12. *Gender structure of employees as at 31 December 2023 in the most numerous occupations*

The most numerous job position at Správa železnic is the train dispatcher, which accounted for 19.5 % of employees as at 31 December 2023. The share of women in this occupation is 34.1 %, which means an increase by 0.4 % compared to 2022.

6.1.3 Employees by time employment type and by employment relationship in 2023

The number of full-time employees as at 31 December 2023 was 16,748, i.e. 99 % of the total number of employees. There were only 145 part-time employees as at 31 December 2023 (see Chart 9).

As at 31 December 2023, 16,268 employees were employed on permanent contracts, i.e. 96 % of the staff. Employees on fixed-term contracts accounted for 4 %, i.e. 625 employees as at 31. 12. 2023 (see Chart 10).



Charts 9 and 10. *ZEmployees by type of time and employment relationship as at 31 December 2023*

6.1.4 Occupational medical services

Occupational medical services for the employees are provided through a contracted provider and, apart from the specified types of examinations (initial, regular, emergency and exit medical examinations), they focus on workplace supervision within the framework of OHS inspections, as well as on the provision of advisory and consultancy services.

Job applicants and employees of Správa železnic visit occupational health physicians throughout the Czech Republic. Over 100 doctors provide these services through a contracted provider.

6.1.5 Safety and health protection of employees

Ensuring occupational health and safety (OHS) is a constant priority in the conditions of Správa železnic and a non-negotiable activity on the part of both managerial and ordinary employees. We place an emphasis in particular on awareness of the risks and hazardous factors encountered, including the determination of appropriate measures to eliminate harm to health, not only to employees but also to external legal entities. An important part of the OHS assurance is formed also of regular OHS inspections, which take place between February and May. The inspection committees identify even minor deficiencies and insufficient system solutions which could be a source of injury. During 2023, the identified deficiencies and shortcomings were repeatedly addressed with the aim of resolving deficiencies from previous years which, although not immediately endangering the life and health of employees, can still have an adverse effect on the actual performance of work. OSH is also ensured by improving the facilities of permanent workplaces. Particular emphasis is also placed on the condition of sanitary facilities and assurance of the necessary renovations, including appropriate heating systems.

The results of the evaluation and monitoring of the development of the safety culture are an integral part of the information and reports on the status in the respective monitored area (operational, facility, fire protection physical safety including physical security performance). These outputs include:

- OHS Status Report,
- OHS Inspection Report.

Implemented and methodically guided activities which lead to the improvement of the safety culture:

- Training of employees and supervisors in the OHS area.

6.1.6 Remuneration of employees and provision of benefits

The principles of remuneration and the scope of employee benefits were agreed upon in the currently valid Corporate Collective Agreement for 2023 and its annexes.

The uniform wage system continued to be applied, the tariff and incentive components of wages were strengthened, and some types of allowances and bonuses were newly regulated. Správa železnic fulfilled all its commitments towards employees in the area of remuneration and employee benefits in 2023. The range of employee benefits provided to strengthen the stabilisation and motivation of employees has been maintained, including the provision of a transport allowance. For example, in addition to working time and holiday benefits, Správa železnic continued to contribute to employees' pension savings and life insurance. The employees working for a specified period of time in physically and mentally demanding jobs are entitled to fitness stays at four contracted spa facilities (Priessnitzovy lázně Jeseník, Lázně Darkov, Monti SPA Františkovy Lázně, Sanatorium Astoria Karlovy Vary). A total of 2,346 employees

took part in a fitness stay in the above-mentioned spa facilities.

The employees of Správa železnic were provided with benefits from the Cultural and Social Needs Fund (FKSP), which were agreed upon with the trade unions in the policies and budget of the FKSP. As in previous years, employees were provided with a meal allowance as well as an allowance for their cultural and sporting activities, and the highest use was made of the allowance for recreation and children's camps. Employees were also able to participate in international events of railway organisations or regional or national qualifications using the FKSP contribution. Employees received cash gifts on the occasion of life and work anniversaries and on the first termination of employment after becoming entitled to a retirement or invalidity pension. In the event of difficult or unexpected social or life situations, employees were provided with social assistance or interest-free social loans. In 2023, for the first time, employees were able to draw the FKSP allowance at their discretion via an employee smart card. All employees were granted this allowance of CZK 1,000, which they used for their sporting, cultural, educational or recreational activities; a large number of them used the allowance to buy vitamins.
In accordance with the negotiated Collective Agreement, in order to supplement the number of employees in long-term shortage occupations (railway infrastructure electrical engineer, communication and signalling engineer, dispatcher and employees who are holders of a train driver licence), the recruitment allowance continued to be provided to employees recruited for these positions. A total of 144 new employees were paid the recruitment allowance in 2023 after passing the specified professional examinations.

6.1.7 Employee training

We regularly educate the employees in the field of relevant legislation, including such areas as the environment and anti-corruption, and we familiarise them with the core values of our internal policy, which we regard as binding.
We prevent corruption with the help of anti-corruption programmes and mechanisms. Správa železnic addresses complaints about breaches of ethical values through the Code of Conduct. We regularly review compliance with legislation and ethical standards. The basic principles of sustainable development of Správa železnic include a process-based training system which reflects current trends and enables employees to use the acquired knowledge not only in their professional but also in their personal lives.
There is a rapidly growing need to develop creativity, innovation and transferable competences (digital literacy, language skills, cognitive abilities, practical skills), which are taken into account in the annual training plan.

In 2023, we opened the Training Centre in Pardubice, which provides employees with comprehensive professional and further training in modern facilities, including the assurance of catering and accommodation services.

6.2 We conduct a dialogue with trade unions

Správa železnic has nine trade union organisations, both multi-professional and those representing particular professional groups of employees. We meet regularly with their representatives and develop a dialogue.

Správa železnic conducts a dialogue with the following partners: the Trade Union of Railway Workers (OSŽ), the Association of Trade Unionists and Transport Services (SOSaD), the Alliance of Railway Operations (ADP), the Federation of Train Crews (FVČ), the Union of Railway Employees (UŽZ), the Federation of Railway Workers of the Czech Republic (FŽ ČR), the Federation of Rolling Stock Foremen (FV), the Democratic Union of Trade Unionists (DUO), the Federation of Train Drivers of the Czech Republic (FSČR).

The aim is, among other things, to negotiate a valid Corporate Collective Agreement which is available to all the employees.

The main pillars of this binding document, whose content is always in accordance with the Labour Code, are:
- social area and protection of health at work,
- remuneration rules,
- benefits programme.

6.3 We conduct a dialogue with professional associations and unions unions

We conduct a continuous dialogue with the Czech Chamber of Commerce, the Confederation of Industry of the Czech Republic, the Transport Association, the Association of Railway Freight Carriers (ŽESNAD.CZ) and the Association of Railway Carriers (SVOD Bohemia).

6.4 We conduct an open dialogue with communities

Through our activities and cooperation, we increase our positive impact on society from a long-term point of view and are perceived as a beneficial, responsible and ethical partner by all the stakeholders.

6.4.1 Regional government, local communities, public

We act fairly and communicate transparently in our dealings with public authorities and with the public, and we strive to interconnect the liberalised railway transport market through our activities.

6.4.2 Supporting small and medium-sized enterprises (SMEs) as subcontractors

Správa železnic's approach to public procurement is to facilitate as far as possible the participation of SMEs, both at the level of the procurement contractors and at the level of subcontractors. Supporting SMEs forms a part of responsible procurement, and Správa železnic has introduced several elements which directly target the support of SMEs into the Catalogue of Elements of Responsible Procurement.

The most commonly used element to support SMEs is their support in the role of subcontractors, specifically by contractually requiring the application of the same payment terms for subcontractors as the main contractor has agreed with us. This element was the most frequently used element of the entire Catalogue of Responsible Procurement elements. Another element used quite frequently was the division of the procurement projects into smaller parts to allow for greater participation of SMEs.

The introduction of a qualification system, which is the subject of a separate chapter in this Report, is also linked to the support of SMEs. The aim of the qualification scheme is to reduce, as much as possible, the administrative burden on suppliers, which will bring most benefits just to small and medium-sized enterprises. The system is then structured so that smaller enterprises can also meet the conditions for inclusion in the various categories of the system and can gradually acquire the qualifications necessary to perform more financially demanding and complex contracts. For more information on the qualification system, see the chapter on the Introduction of the qualification system.

6.4.3 Cooperation with schools

We know that the core activities and operations of our organisation depend on highly qualified professionals, whom we also obtain through close cooperation with secondary schools, higher vocational institutions and universities. In 2023, we collaborated with 10 university faculties and 34 secondary schools and higher vocational institutions. We offer their students a motivational student programme, internships, professional excursions, mentoring, practical training, topics for bachelor and diploma theses, lectures, conferences, HR consultancy and prepare them for professional railway examinations. In the year 2023, 692 practical work placements, 32 internships and 58 excursions took place. The student motivation programme was attended by 7 secondary school students and 10 university students participated in 2023; 13 bachelor or diploma theses were supervised by Správa železnic experts. In addition, we organise open days at the railway, actively participate in company days and job fairs, we are partner in professional seminars or conferences and other educational events organised by schools, with the aim of popularising technology in the Czech Republic. All projects and programmes for students are published on the student website spravazeleznic.cz/studenti. In addition, we are available to students and applicants around the clock via the special e-mail box studenti@spravazeleznic.cz.

6.5 Communication with the media

The media plays an important role in building trust between our organisation and the public. We communicate on a daily basis with journalists from all types of media and answer their questions based on information from employees across the organisation. We continually seek out and raise issues which are relevant to the organisation‘s environment.

We build relationships with journalists through a supportive and constructive dialogue, taking into account the needs of their audience or the local conditions of the region. We develop relationships with communities, suppliers and business partners through a wide range of channels.

We pay special attention to long-term goals, such as high-speed line preparations, and collect feedback from the general public by using special tools.

6.6 Our employees help

A large number of employees volunteer their time to help various charitable activities throughout the year. Last year, all employees joined together in helping Ukrainian refugees and a significant number of employees continue to do so. In the autumn of 2023, following a tragic accident in which several employees died and others were seriously injured, a transparent account was set up to help the bereaved, to which the employees collectively contributed.

6.7 Allocating railway capacity in a responsible way

Správa železnic also contributes to sustainability in the area of rail capacity allocation by strictly complying with Directive 2012/34/EU of the European Parliament and of the Council on the creation of a single European railway area, which is duly transposed into national legislation.

6.8 We sell electricity to customers

The sale of electricity to customers respects all the rules of the Energy Act and its accompanying decrees. Správa železnic issues a Blue Energy Price List for customers, usually for a period of one year.

Communication with customers is also possible remotely via the web interface of the Customer Portal (energie.spravazeleznic.cz). A continuous service for reporting faults and power supply failures is set up for customers. Správa železnic respects all requirements for the quality of electricity supplies according to the legislation in force and continues to develop systems for monitoring these parameters, including the recording and evaluation of fault conditions.

In accordance with the requirements of the legislation, Správa železnic reports the relevant statements concerning the performance of licensed activities to the Energy Regulatory Office (ERÚ).

Science, research, innovation

7.1 We engage in research, development and innovation

Thanks to the central coordination of research and development, Správa železnic carries out activities in this area in an optimum way by addressing projects across the organisation with targeted use of synergies and available resources. Emphasis is placed primarily on areas and topics with significant application potential and, with an increasing emphasis, on reducing the environmental impact of rail operations. Research and development activities naturally reflect current and expected trends in digitisation and smart solutions.

7.1.1. International projects with participation of Správa železnic

In 2023, Správa železnic continued, as a member of the consortium of researchers, to participate in the S2R-OC-IP2-02-2019 project: Support for the Development of a Demonstration Platform for Traffic Management, funded by the Shift2Rail Joint Technology Initiative of the EU Horizon 2020 Framework Programme.

Správa železnic participates as an application guarantor in the international research and development project Regional Hydrogen Trains (TO01000324), dealt with in the KAPPA programme of the Technology Agency of the Czech Republic (TA ČR), which is implemented in the years 2021-2024 with state support and focus on the Energy and fuels area. The aim of the project is to analyse railway lines and localise areas where hydrogen trains would be a better technical, economic and environmental-friendly solution compared to other technologies. The results will enable the identification of preferred areas for the possible deployment of hydrogen trains and replacement of diesel trains on non-electrified railways.

7.1.2. National projects

Správa železnic is an active member of the National Technological Platform Interoperability of Railway Infrastructure, whose aim is to actively and concretely contribute to achieving compliance of construction, production and maintenance of railway infrastructure with requirements of the EU legislation. The flagship project entitled “High-Speed Lines – Future of Sustainable Mobility in the Czech Republic” was financed from the Operational Programme Enterprise and Innovation for Competitiveness (OP PIK).

Within the framework of the 4th public tender of the Programme for Support of Applied Research, Experimental Development and Innovation (THÉTA TK04010081), Správa železnic, together with the Technical University of Ostrava (VŠB-TUO), continued to deal with the project “Reduction of Energy Consumption and Negative Environmental Impacts of Rail Transport Through the Preparation of Infrastructure for Trains with Alternative Propulsion”. The results of the project will enable the identification of preferred areas for the deployment of battery or hydrogen trains in relation to the energy source.

Through the Transport 2020+ programme of the TA ČR, Správa železnic participated in the years 2020-2023 as an external application guarantor in the CK01000098 project Unique Fibre-Optic Sensor for Rail Vehicle Detection led by the Faculty of Electrical Engineering and Informatics of VŠB-TUO. The result of the project is a functional sample of the micro-motion sensor, a microprocessor signal processing unit and another functional sample – the housing of the micro-motion sensor.

In the programme of public procurement in applied research and innovation for the needs of the state administration BETA2 of the TA ČR, Správa železnic submitted, through the Ministry of Transport, an initiation plan for the TITDMD219 programme project entitled “Creation, Validation and Digitisation of Procedures for Assessing Psychological Competence for the Performance of Selected Jobs in Správa železnic”.

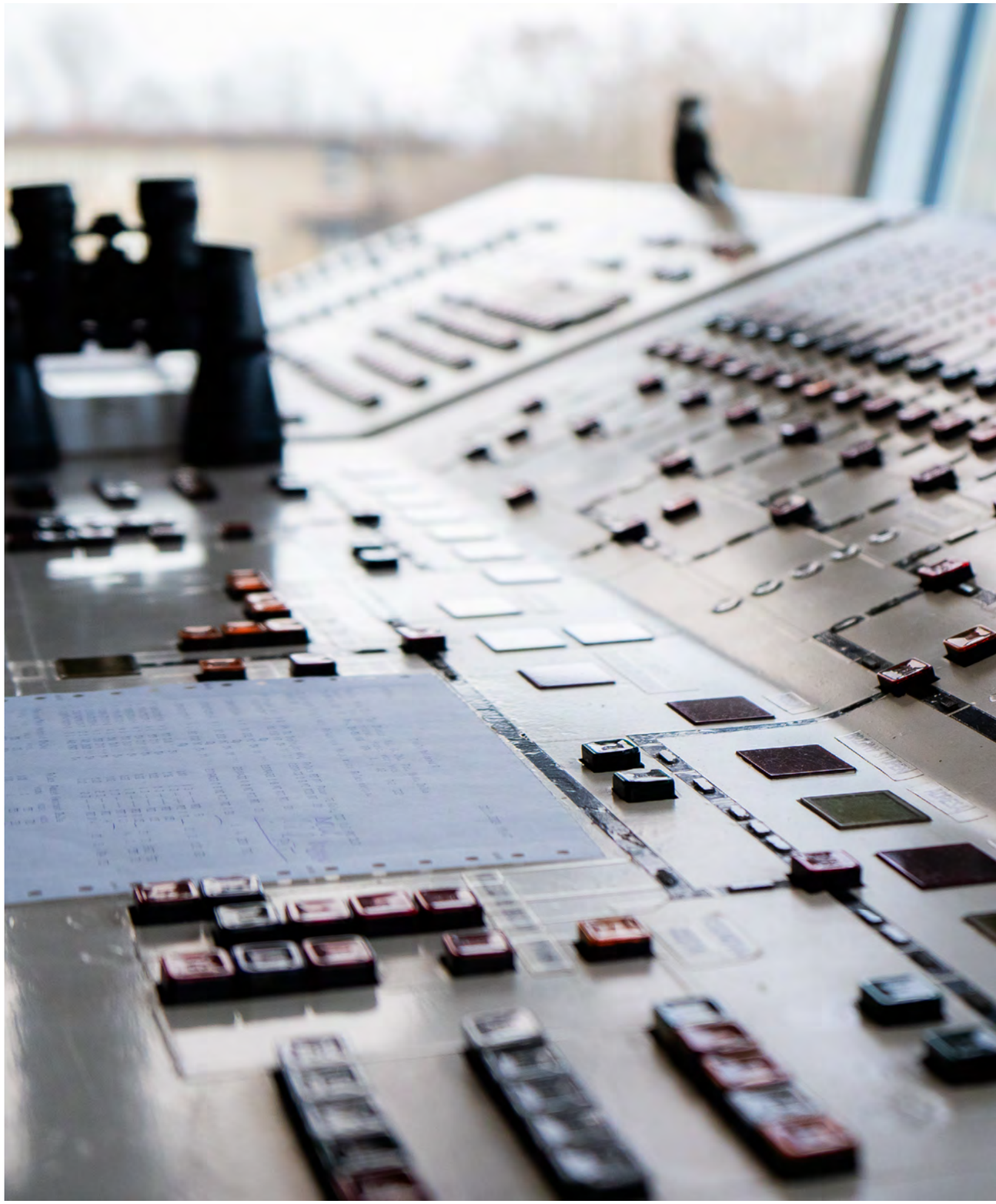
Správa železnic cooperates on a joint project with the Faculty of Nuclear and Physical Engineering and the Faculty of Electrical Engineering of the Czech Technical University in Prague, with the Brno Cybersecurity Innovat ion Hub and the OpenQKD consortium. The subject matter of the cooperation is the testing of two competing technologies for quantum cryptography in a real environment. OpenQKD is a consortium of universities, research institutions, technology centres and mainstream and quantum telecommunications companies (openqkd.eu). The mission of OpenQKD is to popularise and demonstrate that quantum communication is possible with existing technologies and infrastructure. The project is intended to raise awareness of advances in the country and also to provide device performance data which would be useful for a large-scale infrastructure. Quantum cryptography devices use conventional optical communication links, but because

they generate and transmit quantum states of light, they are significantly more sensitive than conventional communications. There is still a lot to know about how they work in real-world situations. Given that most existing fibre optic cables run alongside railway lines, it is particularly interesting to test this technology in these environments and the participation of Správa železnic is appreciated by the researchers. The main objective of the test will be to use the equipment from two major global manufacturers, namely Toshiba and ID Quantique, and to test their performance on the same section.

In 2023, the long-term partnership between the Jan Perner Transport Faculty of the University of Pardubice and Správa železnic was further developed. Among a number of activities, it is possible to mention e.g. the TA ČR research project “Turnout 4.0”, in which Správa železnic acts as an application guarantor, or the project “Predictive Maintenance of the Track Transport Path”, which Správa železnic supported in the form of a so-called letter of intent.

In 2023, the long-term partnership between the Jan Perner Transport Faculty of the University of Pardubice and Správa železnic was further developed. This partnership included especially cooperation at the prestigious Smart Cities Symposium Prague 2023 & European Transport Congress 2023 in May and the Smart Via Vindobona kick-off conference in October with the participation of TU Graz and DB Netz. The Faculty of Transportation Sciences of the CTU in Prague also actively participated in the ETCS expert workshop. Správa železnic cooperated as a co-investigator with the principal investigator – Faculty of Transportation Sciences of the CTU in Prague – in the preparation of the bid for the CL01000037 project Sustainable Rail Capacity Concept – Supporting the Implementation of the TTR Project in the TRANSPORT 2030 Programme of the Technology Agency of the Czech Republic. In addition, Správa železnic cooperated in the role of the application guarantor with the principal investigator – Faculty of Transportation Sciences of the Czech Technical University in Prague – on the preparation of the bid for the CL01000104 project Concept for the Introduction of Predictive Maintenance of Railway Rolling Stock of Carriers Providing Public Services in the TRANSPORT 2030 Programme of the Technology Agency of the Czech Republic.

We can see great potential in sharing our high level of expertise and know-how with research, development and innovation institutions and we strive to support and accelerate the transfer of the latest knowledge into operational practice. This includes, for example, the use of knowledge in the field of network flow modelling and the apparatus of optimisation tasks, which can help maintain the necessary network throughput during demanding closure and outage works on various sections of backbone corridor lines. The Správa železnic‘s strategy also foresees the application of other innovative solutions such as predictive diagnostics, automation with self-correction or stabilisation at degradation.



7.2 We manage the Scientific and Technical Collection Journal

In 2019, Správa železnic took over the responsibility for the editing of the Scientific and Technical Journal from České dráhy, a. s. In connection with the strengthening of the railway's reputation, we can see the role of the Scientific and Technical Journal in the dissemination of knowledge concerning the latest technology. We appreciate the support of the general professional public and institutions in cooperating in its production. The Journal provides a suitable platform for experts from various fields of the railway sector to share their discoveries, findings and experiences. At the same time, not only people from everyday operations, but also experts from cooperating companies and organisations and prospective future employees from among students of vocational secondary schools and universities can draw new information from it. It is the ambition of all involved to maintain the status of the Journal as a major professional publication across all railway disciplines.

Vědeckotechnický sborník (www.spravazeleznic.cz)

We support diversity and stand for equal opportunities

8.1 Equal opportunities

Together with other European railways, we have signed the European-wide agreement of the railway social partners (CER and ETF) – Women in Rail and are working to implement it in our organisation. The agreement supports equal opportunities, promotes equal treatment, non-discrimination and other factors which we need for success at present as well as in the future.

8.2 Barrier-free railway

The continued development of the level of accessibility of railway stations to people with impaired mobility and orientation (PIMO) is a core topic for Správa železnic. In developing this topic, we closely cooperate with a number of organisations representing persons with disabilities. Since 2019, we have also organised the platform for meetings of representatives of the Czech National Disability Council, passenger carriers and Správa železnic.

The actual level of barrier-free accessibility of railway stations and stops is continuously increased mainly by planned capital expenditure activities. The development and level of barrier-free accessibility are shown in Chart 11.

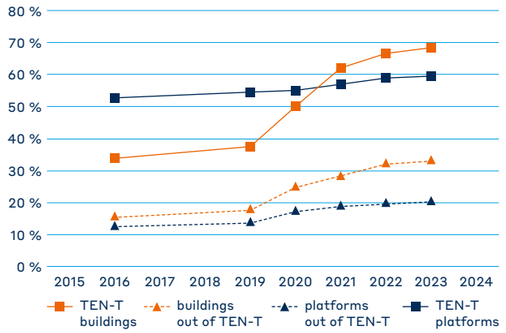


Chart 11. *Development of accessibility of sites according to passenger throughput*

Správa železnic continuously increases the level of barrier-free accessibility. An essential fact is that 67 % of all passengers travel through railway stations and stops with at least one platform accessible. This level should increase to 83 % of all passengers by the completion of the planned actions starting by 2028, while maintaining the availability of resources.

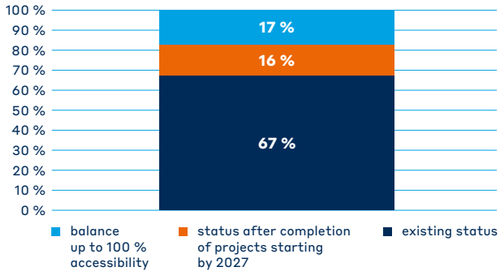


Chart 12. *Level of accessibility of sites according to passenger throughput*

Assistance on the part of Správa železnic for PIMO passengers started at the end of 2019 and around a year later, the introduction of the mobile crew system increased the reach of assistance to 869 stations. This assistance mainly represents the assistance escorting for PIMO passengers from the forecourt area to the platform and back, or between platforms in the case of transfers in the area.
This type of assistance is related to the service of boarding or leaving from the vehicle provided either by the carriers themselves or on the basis of an order from Správa železnic. PIMO passengers can request this assistance within the framework of their travel order. For 2023, assistance was provided to more than 19,000 passengers, representing a year-on-year increase by more than 33 %.

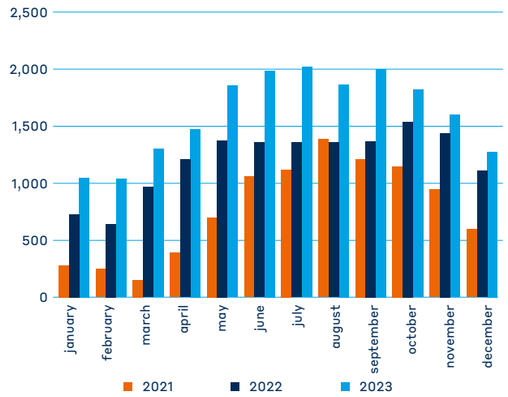


Chart 13. *Development of assistance to PIMO passengers in railway stations provided by the employees of Správa železnic for the years 2021, 2022 and 2023*

The year 2023 was the first ever year in which the Správa železnic provided assistance in boarding and leaving trains using its own mobile lifting platforms. These are platforms type ZP4 manufactured by the Czechia-based company Altech, spol. s r.o. with electric lifting drive, lifting load bearing capacity

of 300 kg and with characteristics meeting the requirements of the European regulations. Platforms of this manufacturer are used on railways in several European countries, such as France, Austria, Slovakia or Poland.

In 2023, 31 ZP4 mobile lifting platforms were put into operation in 13 locations – Brno hl.n., Ostrava-Svinov, Olomouc hl.n., Ostrava hl.n., Hranice na Moravě, Přerov, Plzeň hl.n., České Budějovice, Praha hl.n., Kolín, Praha Masarykovo nádraží, Beroun, Ústí nad Labem hl.n. On the basis of the evaluation of the operation in the first half of the year, it was decided to purchase 13 more platforms, which led to the increasing in the number of platforms in operation to 44 in 22 locations as at 10 December 2023. Thanks to this equipment, over five and a half thousand assistances were provided to people with impaired mobility when boarding and leaving the train in the first year.

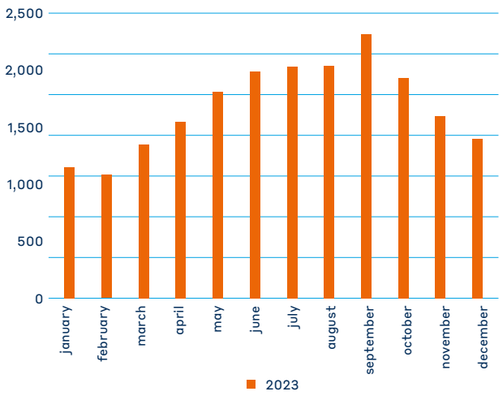


Chart 14. *Development of assistance to PIMO passengers in railway stations provided by the employees of Správa železnic for 2023*

To enable the independent movement of the blind and partially sighted, tactile elements are installed in station buildings and on platforms – artificial guide lines, e.g. with the function of a warning strip at the platform edge. In buildings and on platforms they can use orientation voice beacons. A special chapter consists of the tactile Braille labels placed, for example, on the handrails of staircases or on the doors of public toilets. We adapt our web services to blind and partially sighted passengers thanks to our cooperation with SONS ČR (Czech Blind United) and use the services of our own accessibility consultant.

We are useful for the society

9.1 Prevention and safety campaigns

In 2023, we focused intensively on safety awareness around the railway and on warning concerning the risks of disregarding the rules. In the first half of the year, we initiated the creation of a Memorandum of Cooperation for the Prevention of Accidents on Railways. Together with us, České dráhy and the Rail Authority signed it under the auspices of the Ministry of Transport of the Czech Republic as well.

“Be aware of your surroundings, respect the rules and never take risks!” were the main messages we decided to convey with our joint safety campaign. The first part of the campaign took place during the summer holidays, primarily on social media, and explained the safety rules in an engaging way, especially to the young generation.
Then, in the autumn, the second part of the campaign called We Will Miss You was launched through TV spots, online advertising and a special website. Viewers of all generations were warned against irresponsible behaviour by three characters representing victims of railway accidents.
The campaign‘s ambassador was actress Linda Rybová.

During the year, a number of lectures were traditionally held at primary and secondary schools with the participation of railway firefighters and investigators.
The Prevention Train for Safety Railway also ran again and the You Can‘t Stop the Train roadshow took place, during which children attended lectures by experts and watched safety films.
At the Prague Information Centre of Správa železnic, we started organising safety workshops for pre-school children and primary school pupils in 2023.

9.2 Crisis communication

We communicate professionally, being aware of our responsibility for the organisation’s image in society. We work within the framework of clearly defined organisational structures with transparent policies and responsibilities. The core values are openness, accountability, professionalism and respect.

We therefore communicate fairly and quickly (on a 24/7 basis) in crisis situations. The precision and speed are aided by the crisis manual which we have developed, which identifies possible crisis scenarios, including their resolution and the sequence of steps. Designated persons are aware of how to behave in crisis situations and who is authorised to speak or act for the organisation.

9.3 Information centres

9.3.1 Contact centre

Enquiries from the general public addressed to Správa železnic are handled by operators on the information line 800 21 00 21. Operators provide information to the public on weekdays from 7:00 to 19:00 hours. Most often they ask for specific information about railway operations, modernisations or current closures and repairs. They can also help with finding train connections.

Passengers have also reported faults and breakdowns through the contact centre, or we have, for example, cleared up mess at railway stations on the basis of their suggestions. Expert queries are recorded by the operators via a contact form and a subsequent response is sent either by email, post, data box or it is provided by means of a return phone call.

9.3.2 Information centres

In 2023, there was one information centre of Správa železnic in Prague and another one in Ústí nad Labem. The former presents the profile of our organisation and the most important projects through large interactive panels. We also organise safety workshops and presentation days of important projects with the participation of our leading experts. A number of events have featured upcoming high-speed lines or interesting railway specialisations.

The Ústí nad Labem Information Centre is dedicated just to high-speed lines. Trained staff, information panels or a 3D model present all aspects of the preparation of the cross-border HSL Prague – Dresden, including the Ore Mountains Tunnel. The general public will learn not only about the preparation of individual sections, but also about the future environmental and economic impacts of high-speed lines.

In addition to providing information, the staff of both information centres also provide assistance services for blind and partially sighted passengers or wheelchair users.

9.4 Presentation of constructions

Every year, we implement hundreds of constructions of different scope and complexity on the Czech railway network – from the modernisation of international corridors to, for example, repair of switches on a local railway line or renovations of station buildings. An overview of most capital expenditure projects with basic information about them is available on the Interactive Map of Správa železnic (mapy.spravazeleznic.cz). Many of the buildings listed on the map have their own information leaflet, which is gradually updated.

Key projects have their own web presentations, such as the Výtoň Bridge, Fanta's Building at the Prague Main Station, high-speed lines or the Modernisation of the Prague – Kladno Line with the connection of Václav Havel Airport Prague. Selected constructions are also presented to the public in the form of open constructions days.

9.5 Interactive Map

The Interactive Map on the Správa železnic's website was launched already in 2019 to provide the public with insight into projects across the Czech railway network. It contains information on major investment and repair works, including upcoming high-speed lines. Interested parties can also search for construction projects by co-financing, for example. In many cases, the construction pages also contain links to additional information, such as videos on YouTube or social networks.

Gradually, the Interactive Map has been turned into a portal which, in addition to constructions, also contains information about trains and detailed information about railway stations and stops. The location of trains, integration with the information board system and information on services and station facilities make the Interactive Map a useful tool for all passengers.

9.6 Emergencies and traffic restrictions

We pay special attention to informing passengers about planned and operational traffic restrictions. Extraordinary events and closures are available via the Interactive Map and the new Datel (Woodpecker) mobile application, which we launched in a pilot operation at the end of the year. The application combines all the features of the Interactive Map and improves the user-friendliness of the information subscription. Its name follows the successful automated Datel account on social network X, which has already surpassed 3,000 fans in 2023. We automatically inform about all significant incidents, which we supplement with up-to-date information. In 2023, we also started presenting a weekly overview of the most important planned closures on the account.

9.7 Open data

We publish information in a way which allows remote access in an open and machine-readable format. Access is conditioned by a contractual relationship as we are a critical infrastructure operator.

9.8 Support for people disadvantaged in the labour market

9.8.1 Support programme for people disadvantaged in the labour market

Správa železnic is significantly involved in the field of support for people disadvantaged in the labour market (PDLM). We are one of the most active contracting authorities in the Czech Republic, and these activities have been presented to European institutions or representatives of the professional public at the conference of the Office for the Protection of Competition. A pillar of the current practice of supporting people disadvantaged in the labour market is the consideration of the involvement of these people in the evaluation of sub-limit sectoral public contracts for repair and maintenance work. This practice was introduced in November 2021 and is applied especially at Regional Directorates. Within the framework of the evaluation of tenders, a contractor who undertakes to involve disadvantaged people in the labour market to a specified minimum extent in the performance of a public contract is bonused.

The data for 2023 show that the aforementioned strategy is still very successful, with suppliers committing to involve disadvantaged people in the performance of the public contract in a total of 194 cases over this period. Total involvement of disadvantaged people in the performance of the public contract occurred in 601 cases in 2023, with a total of 397 unique persons involved. Správa železnic thus made a significant contribution to the inclusion of disadvantaged people in the labour market in common life during this period.

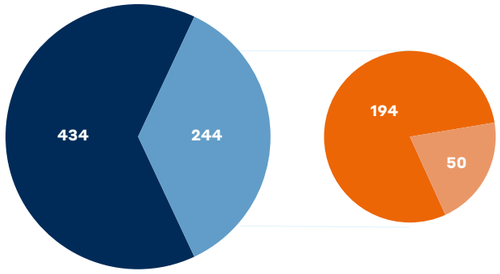


Chart 15. *Public contracts with support applied in 2023 at the Regional Directorates*

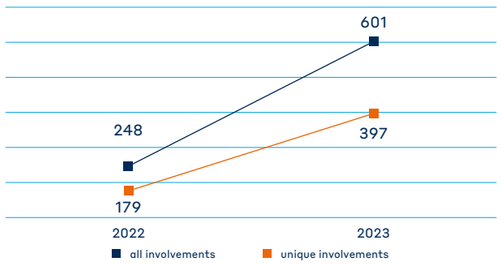


Chart 16. *Number of involvements of people disadvantaged in the labour market (PDLM)*

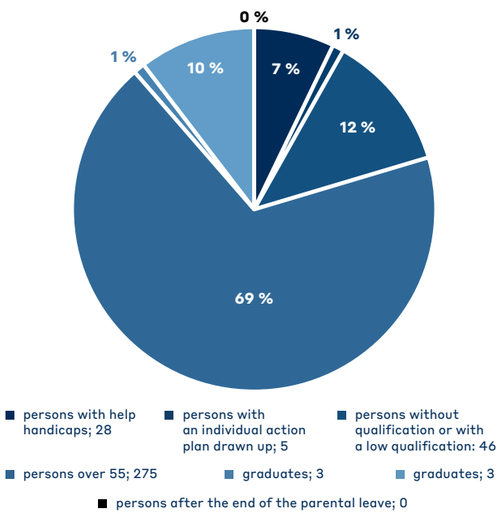


Chart 17. *Representation of PDLM target groups among supported persons*

In addition to the evaluation of the involvement of disadvantaged people, Správa železnic applies other procedures to selected contracts which have a positive impact on disadvantaged people on the labour market.

9.8.2 Social categories of the qualification system

Správa železnic's programme of support for people disadvantaged in the labour market includes a special category within the framework of the Qualification System, which allows the sectoral contracting authority to categorise the required performance and to set qualification criteria for these categories.

In the area of employment of disadvantaged people, a special category was created in 2023 for those contractors who specialise in the employment of such persons. The principle of this category consists in the fact that contractors who would otherwise not be able to be classified in the other categories of the scheme because they do not have the necessary qualifications can be classified just in this category.

The social category is a category focused on services not requiring special qualifications, e.g. simple construction or repair works on buildings, which are not interesting enough to contractors classified in the other categories of the scheme. This will give classified contractors the opportunity to work for Správa železnic and to gradually acquire the qualifications required for inclusion in the standard categories of the qualification scheme, both at the contractor's level and at the level of individual employees.

In order to qualify for the social category, contractors will only be required to submit an affidavit of basic and professional competence in accordance with the Public Procurement Act and a commitment to involve people disadvantaged in the labour market in the public procurement contract. The category rules are consulted with the Ministry of Labour and Social Affairs and the Ministry of Regional Development.

As at the end of 2023, there were a total of 12 contractors registered in this category level of the Simple Services, and 10 contractors in the Simple Construction qualification level. At the end of the year, 2 pilot public contracts were also tendered, within the framework of which the contractors undertook to involve a total of 11 different persons from the target group Unskilled or Low Skilled Person in the performance of the contract.

We expect that in 2024 the category will be used intensively and will suitably complement the existing practice established by the Správa železnic's Programme of Support for Disadvantaged People in the Labour Market.

9.9 Caring for railway heritage

Správa železnic is a partner of events commemorating important anniversaries of the opening of the railway lines for operation. Based on the initiative of the Director General in 2019, Správa železnic is systematically taking care of the railway heritage assets. One of the particular results is the renovation of the Tatra and Warszawa track inspection cars and the Tatra engine carriage.

9.9.1 Museum exhibition

In order to preserve railway heritage, we operate, in close cooperation with the National Technical Museum, the Museum Exhibition of Communication and Signalling Technology in Hradec Králové, which represents a unique collection of elements and equipment of communication and signalling technology at a European level, from the early days of the railway up to the end of the 20th century. The uniqueness of the exhibition is also enhanced by the fact that, with the exception of a single hall (furnished as a transport office from the beginning of the 20th century), you can move among the exhibits and try out their function with your own hands.

Since November 2005, the museum exhibition in Děčín on the “North” signal box 15 has been open to professional circles as well to the general public with a thematic focus on the development of the Děčín railway junction and electrodynamic interlocking equipment. The signal box was, in the first half of the twentieth century, the most sophisticated system for assurance of safety of train transport in Europe.

Muzeum (https://www.spravazeleznic.cz ctd/muzeum)

9.9.2 Cooperation with the National Technical Museum and the National Heritage Institute

On the basis of the concluded cooperation agreement with the National Technical Museum of 4 August 2020 and the memorandum of mutual cooperation with the National Heritage Institute of 1 December 2021, Správa železnic declared its interest in contributing to the preservation and cultivation of the historical heritage and to the creation of a high-quality contemporary stage based on the current requirements of railway modernisation through a joint and coordinated approach.

Governance

Obstacles

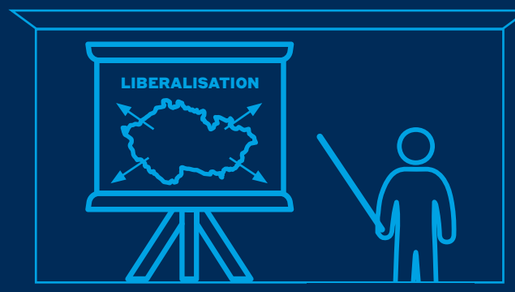
Competence

RESPONSIBLE MANAGEMENT AND COMPLIANCE

None of the Správa železnic's environmental or social objectives could be achieved without effective management of the organisation.

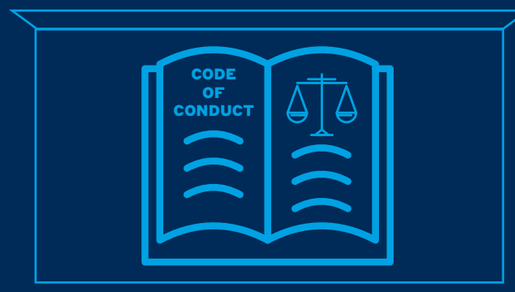
Správa železnic requires the employees, including management and top management of the organisation, to comply with a number of obligations set out in the Code of Conduct binding on everyone within the organisation.

Vertical compliance with the obligations applies to the handling of data, whistleblowing, but also to the procedure for selecting suppliers, responsible procurement, purchases of commodities on the stock exchange and the choice of how to innovate within the organisation.



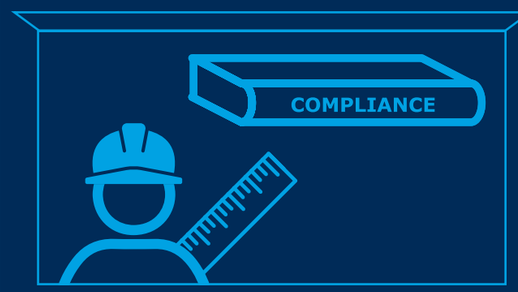
Railway Liberalization

The number of carriers to whom we sell track capacity increases annually. In 2021, we had a record 126 railway carriers as customers, which is an increase of nearly 20 % compared to 2019.



Code of Ethics

We have established and adhere to company principles and ethical behavior policies. These are embodied in our Code of Ethics.



Compliance Code

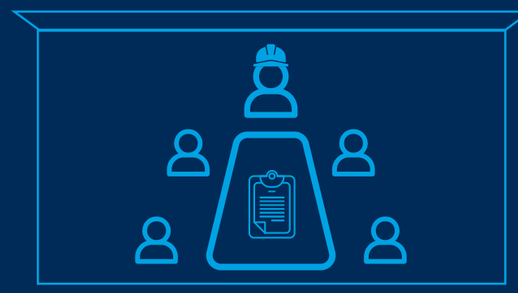
We have implemented a Compliance Code. The setup and oversight of adherence to compliance rules are monitored by our compliance officer.

Protection of personal data

We prioritise the protection of personal data. Our employees participate in annual e-learning training sessions on GDPR (General Data Protection Regulation).

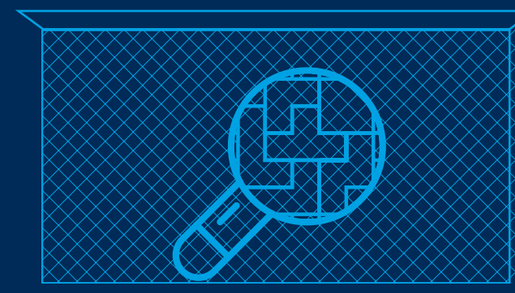
Sustainability management

Sustainable railway development and the responsible functioning of our organisation are top priorities. We focus on the social impact of our activities.



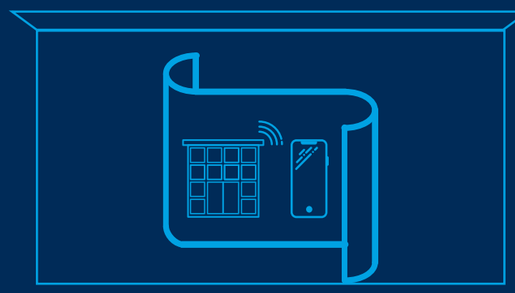
Responsible input

When bidding for public contracts, we prioritise socially and environmentally responsible procurement, requiring suppliers to protect the environment and ensure fair treatment of their employees.



Transparency

We prioritise transparency, allowing public access to information such as an interactive map showing ongoing construction, track restrictions, and train locations.



Innovation

We strive to expand the usability of railway buildings, transforming them into fully functional public spaces offering a diverse range of services. We are also digitising our processes.

Management activities of Správa železnic

10.1 Sustainability management at Správa železnic

Sustainability in our organisation is based on the Green Rail Vision, the Strategy of Správa železnic and the Organisation's Sustainability Strategy. With regard to the requirement of systematically assessing and reporting the environmental, sustainability, social and governance (ESG) impacts of the organisation's activities and capital expenditures, the Director General of Správa železnic established a management team and working group to implement sustainability reporting in ESG criteria as at 1 September 2021. In November 2023, Správa železnic started the implementation of the new European ESRS standards.

We ensure rail operability

The main subject matter of our activity is the operation of the railway infrastructure, including the operation of the rail system. This concerns in particular ensuring its operability and maintenance, i.e. assurance of the prerequisites for smooth and safe railway transport.

The following activities are a part of the rail system operability assurance:

- repairs and maintenance of nationwide and regional railways in the sectors of railway lines (superstructure and substructure), constructions of substructures, bridges and tunnels, buildings and ground structures, electrical and power engineering facilities and communication and signalling equipment under its administration,

- repairs and maintenance of real property assets at railway stations, including cleaning and security in buildings.

For this purpose, Správa železnic uses both its own personnel, mechanical or technical capacities (mainly organisational units – regional directorates and specialised units) and capacities of suppliers operating in the relevant market. The selection of these suppliers is carried out by means of public procurement. In the period under review, the provision of the above-mentioned activities was covered by the budget of the SFDI, which provides us with non-investment means, and by the revenues generated from rents from land, buildings and non-residential premises or from revenues for services and external performances related to this segment.

Správa železnic has established principles to ensure the proper technical condition, development and modification of railway infrastructure facilities. The management and diagnostics of the technical condition of the rail system are based primarily on the analysis of the diagnostic tools of the Centre for Technology and Diagnostics (CTD) and the Regional Directorates (OŘ), on the basis of which repair and maintenance plans are drawn up to ensure all the obligations of the railway operator.

11.1 Selected quantitative and qualitative operational performance indicators in the 2023 reference period

Monitoring and evaluation of the indicators of railway operability (not exceeding the limit values of railway line speed limits, so-called slow runs introduced due to inadequate technical condition of the infrastructure):
- The target limits set for 2023 were met.

In 2023, 295 targeted repair projects were being prepared or implemented with the aim of eliminating the substandard condition of parts of the infrastructure or maintaining the existing parameters of the railway infrastructure or achieving their improvement; of which:
- 181 projects with costs over CZK 10 million,
- 20 projects with costs over CZK 100 million.

Within the framework of the implementation of cyclic maintenance, pilot projects were carried out in the years 2020-2021 in the section Děčín-Prostřední Žleb – Dolní Žleb. In 2023, three cyclic maintenance projects were implemented in the following sections: Praha Běchovice – Poříčany, Praha Holešovice – Vraňany and Třebovice v Čechách – Hoštejn. The cyclic maintenance includes in particular the verification of the set-up of the system for monitoring the life cycle of selected infrastructure elements, the frequency of defects and failures. The entire first rail transit corridor is monitored in this way. Data are updated on all corridor lines. Since 2023, also the other TEN-T lines have been monitored. A web application has been developed to monitor the implementation and evaluation of the pilot projects. From the available data it can be noted that cyclical maintenance has a positive impact on the capacity of the railway, with fewer closures and their shorter duration.

Increase in the level of technical condition of bridges:
- We have reduced the share of bridges rated with the worst grade 3 to 3.36 % at the end of 2023 (226 bridges out of a total of 6,728 bridges);
- We are working on the update of the Stable Operability Programme for Railway Bridges in 2024-2028, which set the objectives and trends in the field of improvement of the condition of bridges;
- We continue in the implementation of a superior scope of diagnostics and recalculations for selected railway bridges, as an essential safety guarantee of operationally exposed bridges with long bridge lengths (32 bridge constructions in the project “Diagnostics and Recalculations of Strategic Bridges”).

Launch of the project Creation and Development of Digital Technical Maps (DTM) and Mapping of Technical Infrastructure:
In the second half of 2022, the implementation of the Digital Technical Map of Railways (DTMŽ) project was launched, whereby Správa železnic joined the project of implementation of the Digital Technical Map of the Czech Republic, which is to become an integral part of the digitisation of the construction, zoning and land-use planning agendas. Intensive collection of data on infrastructure and preparation of the relevant information system were initiated. DTMŽ brings a new quality to the existing description of the railway network. For the entire railway network, previously fragmented, incomplete or multiple data will be unified, completed and made available. The project is co-financed by PIK Operational Programme.

Modernisation projects of mechanisation for increasing efficiency of maintenance and vehicles for the railway infrastructure diagnostics:
- Completed the delivery of 3 two-way excavators with a wide range of accessories for multi-purpose use in 2022
- beginning of routine operation of the new MVŽSv2 railway superstructure measuring vehicle for measuring speeds up to 200 km/h and the new EM100 track inspection and measuring vehicle;
- selected major ongoing projects:
  - Equipping 98 special powered vehicles of Správa železnic with the onboard part of the ETCS system (completion in 2024);
  - Delivery of six new special traction vehicles for inspection and maintenance of catenary lines of the MTW type series, the first vehicle was delivered in November 2023, the remaining vehicles will be delivered during 2024;
  - Bridge Inspection Unit intended for inspection and expert work on bridge structures (completion in 2023);
  - Mobile BTS: delivery of 1 mobile base station (road truck with bodywork including the installed technological part) (completion 2023);
  - upgrade of special powered vehicle FST4 for spatial clearance diagnostics – upgrade of the diagnostic system to ensure spatial clearance diagnostics of the Správa železnic's railway lines. The contractor PONYSTAR s.r.o. has completed the installation of the diagnostic system in the vehicle in 2023 and has started a trial run
  - measuring unit for diagnostics of the traction supply system (delivery of 2 passenger rail cars for long-distance international transport for a speed of 230 km/h for their subsequent conversion and installation of diagnostic technologies
  - implementation of the onboard part of the ETCS in the vehicles: MV ERTMS, FST4 and DJ NDT.

Improved passenger comfort during the reporting period:
- The upgrading of toilets to the new standards is continuing, including the installation of entry and fee collection equipment. More than 30 additional sites have been equipped with this facility, bringing the total number to 162 in 2023. All newly installed facilities have payment terminals for cashless payment options. In 2023, Správa železnic achieved revenues in this area amounting to almost 60 million euros. The share of non-cash payments amounted to 31 %;
- In November 2023, in cooperation with an external partner, we started the implementation of the project „Railways without plastic". Within the framework of this project, passengers can get free filtered drinking water from dispensers at selected railway stations. The aim of the project is to offer an alternative to bottled drinking water and thus to reduce the amount of waste produced at the stations. In addition, the vending machines are a trusted and safe solution in terms of ensuring 100 % hygienic water intake and efficient regular maintenance. In the first phase, the vending machines will be placed in 12 passable locations. The data available to Správa železnic in less than two months of operation show a great interest in this alternative. A total of 2,345 litres of water has been collected, equivalent to 4,690 half-litre PET bottles or 118 kg of plastic;
- We have completed repair works on almost forty station buildings;
- We provide assistance to people with impaired mobility and orientation within the framework of the single fare system at railway stations, with an increase of 33 % compared to the previous year. The year 2023 was the first ever year of operation of our own mobile platforms for boarding on and alighting from trains. Passengers used the service in more than 5,500 cases.

We act ethically and adhere to corporate principles

12.1 Code of Conduct

The Code of Conduct of Správa železnic contains the core values, principles and objectives which we follow in the conduct of our activities. By respecting and following the principles of the Code of Conduct, we effectively prevent undesirable behaviour. The Code of Conduct is binding on employees.

Etický kodex (spravazeleznic.cz)

Code of Conduct

The Code of Conduct training is mandatory for employees and must be completed by every new employee and once a year by every existing employee. This training also includes the training aimed at the Správa železnic's Programme of the Code of Compliance and the Guideline Against Undesirable Conduct. The completion of the training sessions is monitored.

Contacts for the Compliance Officer are available in the event of suspected undesirable conduct. There is also a functional internal whistleblowing system in place in accordance with the Act No. 171/2023 Coll. on Whistleblower Protection.

12.2 Code of Compliance

In 2020, the Code of Compliance of the Správa železnic's Programme, was adopted, which fully incorporates the organisation's previous anti-corruption program and expands it to include additional aspects within the framework of comprehensive risk management in this area. This programme has been implemented in the overall internal control system of the organisation, is being evaluated and further developed according to the requirements of legislation and the needs of the organisation. At the same time, it is set up in such a way that it can minimise the emergence and exposure to risks, but at the same time to enable the organisation to evolve from the criminal liability of a legal entity in the event of detected illegal actions of its employees.

In 2023, the compliance officer received several dozen notifications, of which seven were relevant (see Table 15). In this year, a special secure line was also installed for reporting possible unwanted conduct, known as whistleblowing. There were seven relevant complaints this year to investigate whether or not a crime or offence had been committed. In the majority of cases, there was no direct evidence of a breach of criminal law. In one case, the compliance officer submitted a complaint to the law enforcement authorities for a review of the legality of the acts. In addition, the Compliance Officer drew the attention of the concerned departments of Správa železnic to some ethical problems in the area of personnel policy, in particular in the area of staff reduction, and asked for their elimination in the future. The interaction and cooperation from both senior and rank-and-file employees was seamless.

The compliance training was conducted in 2023 for all employees through e-learning. In addition, the directors of all Regional Directorates and selected organisational units were trained in person, as well as senior staff of the organisational units at the meetings of the directors of the organisational units. In the future, potential problematic sections and processes which could predict potential criminal threats to Správa železnic will be identified. Prevention of potential undesirable

	Number
Total notifications	7
Total anonymous notifications	2
Forwarded to the administrative authorities competent to hear or otherwise act under the Code of Administrative Procedure	0
Notified to the public prosecutor or police authority	1
Investigation in progress	0
Completed investigations	6

Table 13. *Total number of relevant compliance notifications in 2023*

We protect personal information and data

13.1 Protection of personal data

As a data controller, we fully respect the right to privacy and the protection of personal data of natural persons which we process for legitimate purposes, and only on the basis of a demonstrable legal reason for processing personal data in accordance with the relevant legislation:

- Regulation (EU) 2016/679 of the European Parliament and of the Council on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (hereinafter referred to as “GDPR”).
- Act No. 110/2019 Coll., on the processing of personal data;
- SŽ SM097 Guideline (Personal Data Protection)

The information on the processing of personal data is published on the website of Správa železnic.

13.2 GDPR training

An e-learning training session is organised every year in cooperation with the Data Protection Officer and it is intended for all authorised persons of Správa železnic dealing with personal data processing.

13.3 Data Protection Officer

The Data Protection Officer of our organisation

a) is actively involved in assurance of the protection of personal data in accordance with the GDPR and in accordance with the Act No. 110/2019 Coll.;

b) covers the personal data protection agenda, keeps records of personal data processing activities;

c) provides recommendations and information to the employees on the protection of personal data in accordance with the GDPR and the Act No. 110/2019 Coll.;

d) informs the employees and suppliers on how to secure the personal data we process;

e) informs the employees of their obligations under the GDPR and Act No. 110/2019 Coll.;

f) monitors our organisation’s compliance with the GDPR and the Act No. 110/2019 Coll.;

g) regularly performs personal data protection audits in accordance with the internal regulation “SŽDC SM113” – Conduct of Internal Control Activities and SM097 – Personal Data Protection;

h) spreads awareness and trains responsible persons in our organisation on personal data protection;

i) informs and makes recommendations in the assessment of the impact on the protection of personal data and in the processing of the balance test in our organisation;

j) acts as a point of contact for the Office for Personal Data Protection (OPDP), reports to the OPDP all the data protection incidents areising, investigates, records and reports the same to the Director General;

k) draws the attention of the Director General to deficiencies and potential risks in the area of personal data protection in our organisation;

l) is a member of the Association of Data Protection Officers of the Czech Republic.

We award contracts in a responsible way

Správa železnic is a public as well as sectoral contracting authority according to the Act No. 134/2016 Coll. on Public Procurement. Therefore, Správa železnic is subject to the obligation of responsible procurement expressed in the principles set out in Section 6 of the aforementioned Act.

Nevertheless, Správa železnic has been applying the principles of responsible public procurement since 2020, when the first methodological guide on responsible procurement in the organisation was published, which contains a catalogue of mandatory and optional elements of responsible procurement. In the area of responsible procurement, Správa železnic has made significant progress in 2022 both in the methodological and practical field in the specific public procurement. To expand the proper application of responsible procurement in the organisation, we have taken a number of steps.

In 2021, the obligation to complete a Responsible Procurement Checklist for the implementation of each procurement procedure was introduced, thus achieving a widespread consideration of the issue of responsible procurement within the organisation.

In addition, a detailed record of the use of responsible procurement within the framework of the organisation has been prepared to provide the necessary statistical information on the extent and use of responsible procurement elements. This registration system will allow both detailed reporting on responsible sourcing inside and outside the organisation and an assessment of the success of responsible sourcing. The evaluation will be followed by steps to further improve procurement practice in this relatively new area, which is still dynamically evolving.

14.1 Application of the elements of responsible procurement

The elements of responsible procurement used in the organisation are defined in the Catalogue of Elements of Responsible Procurement, which contains both a description of the elements divided into individual areas and model provisions for their application in specific public contracts. The elements of responsible procurement are divided into a total of 11 groups according to the type of performance required or the focus of the elements. The responsible procurement elements used are recorded in an internal information system. The implemented registration of used elements of responsible procurement throughout the whole organisation is unique in the Czech environment and will serve for further improvement of responsible procurement practice at Správa železnic.

The records show that during 2023 a total of 2,270 responsible procurement elements were applied within the organisation, which is a significant increase from 2022, when 964 elements were claimed. This significant increase is the result of Správa železnic's long-term efforts to apply the elements of responsible procurement across the board, i.e. to ensure that our practice has the greatest possible impact on society and the environment. The increase compared to 2022 is evident in all the elements of responsible procurement used, as can be seen in the figures below.

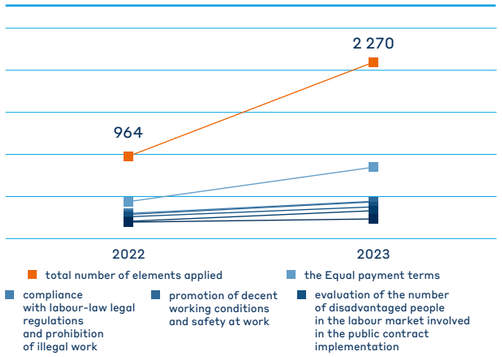


Chart 18. *Evolution of the number of applications for selected elements of responsible procurement*

The most frequently applied elements

Responsible procurement element applied	Number of uses in 2023
Support for small and medium-sized enterprises as subcontractors – equal payment terms	815
Compliance with labour-law legal regulations and prohibition of illegal work	311
Promotion of decent working conditions and safety at work	300
Evaluation of the number of disadvantaged people in the labour market involved in the public contract implementation	260
Student excursions	204
Requirement to involve a specified number of disadvantaged people in the labour market involved in the public contract implementation	102
Remuneration above the minimum level set by applicable law	98
Division of the public procurement contract into smaller parts	61
Certification of the goods (e.g. Environmental brand)	35
Recycling aggregates recovered from the track bed	33

Table 14. *Most frequently applied responsible sourcing elements*

As it is clear from the above-stated data, the elements of responsible procurement relating to socially responsible procurement and support for small and medium-sized enterprises were used extensively. The environmentally responsible procurement elements were used less frequently, mainly because the supply in question is usually purchased centrally for a longer period. There are therefore significantly fewer public contracts where these elements can be applied. However, this is compensated by the large volume of supplies which are procured from these centrally competed public contracts. The impact of these individual procedures is therefore also significant.

Responsible procurement within the organisation is also dealt with in the chapters dealing with support for small and medium-sized enterprises and support for people disadvantaged in the labour market.

14.2 Introduction of a qualification system

In June 2022, Správa železnic started receiving applications from contractors for inclusion in the qualification system. The main reason for its introduction is the expected simplification and acceleration of the public procurement process. The contracting authority shall identify from its public procurement portfolio the individual typical fulfilments for which it intends to introduce a qualification system and shall classify them into categories to which contractors may apply for inclusion. The contractors included in the system then no longer prove their qualifications in the procurement itself, since they have demonstrated the necessary qualifications when they were included in the qualification system.

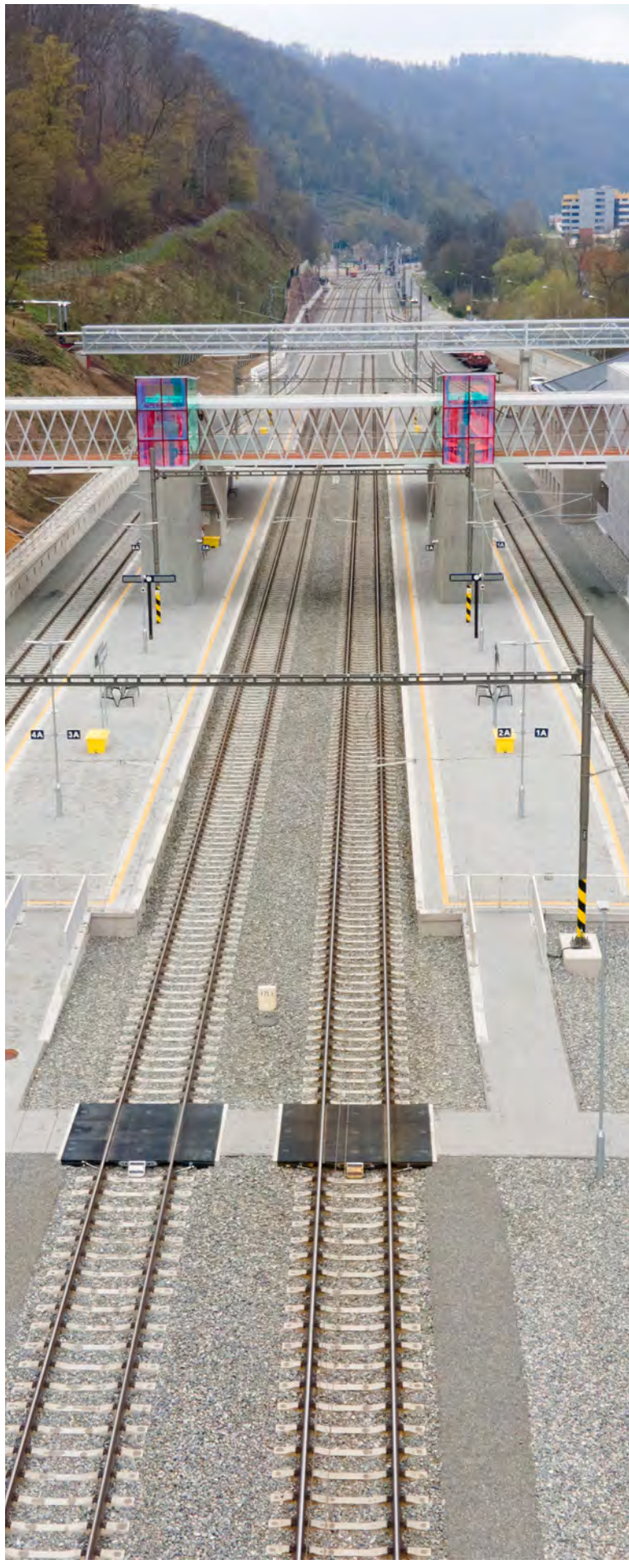
The applications for inclusion are submitted via the software tool ISKD (Information System for Supplier Qualification), which is available at https://iskd.spravazeleznic.cz. It is then also used for further communication with suppliers and contains all the necessary functions on the contracting authority's side to assess applications and the subsequent management of suppliers included in the system.

Within the framework of the project for the introduction of the qualification system, only sectoral public procurement contracts were included in the pilot deployment of the system, which are not announced according to the Public Procurement Act, but according to the internal regulations of Správa železnic. Therefore, the majority of these are sectoral below-threshold public contracts.

As at mid-October 2023, a total of 203 suppliers were registered in the ISKD and a total of 244 applications for inclusion in the qualification system were approved. Most of the categories of the scheme have been filled by suppliers during 2023, including the special category to support people disadvantaged in the labour market.

In January 2023, the first tenders were launched in the pilot operation of the qualification system. The primary objective of the pilot operation is to gradually ramp up the procurement in the qualification system, verify the correct technical setup of the ISKD on a selected sample of contracts and make any necessary adjustments to deploy the qualification system into full operation. A secondary objective of the pilot run is to allow sufficient time for suppliers to fill categories of the system where routine procurement is not possible due to their current filling. By the end of 2023, a total of 263 applications for inclusion in the qualification system have been approved. Most of the scheme categories were filled by contractors during 2023, including a special category to support people disadvantaged in the labour market. In the pilot operation of the system, a total of 21 public contract tenders have been launched by different organisational units of Správa železnic with an estimated value exceeding CZK 330 million.

Initial experience with the operation of the system is positive, as it brings time savings in tendering procedures on the part of both Správa železnic and suppliers. We are also seeing an increase in the number of tenders received. We are continuing to work on the development and improvement of the whole system, both in the form of modifications to the ISKD and through awareness-raising activities towards suppliers who are not yet included in the system. The transition of the qualification system to full operation is planned for 2024.



We pay attention to the quality standards of the suppliers

15.1 Quality care of products and services for the railway transport infrastructure

In connection with ensuring the safety of rail system operation, we have a long-established system of quality assurance of products and services intended for the railway infrastructure.

This system has been regulated by the following instruments:

- SŽDC Guideline No. 34 – Guideline for the commissioning of products which are parts of communication and signalling equipment and electrical and power engineering equipment on the railway infrastructure owned by the state through Railway Infrastructure Administration as amended by Amendment No. 1, No. 21783/07-OP;

- SŽDC Guideline No. 67 – Quality care system in the field of line management, Ref. S35410/11-OTH;

- SŽDC Guideline No. SM 08 – Conditions for Acquisition of Products for Verification of Safety and Functionality of their Use in Railway Infrastructure, Ref. 63669/2019-SŽDC-GŘ-013.

It is also taken into account in the technical quality conditions of the state railways construction (TKP), the SŽDC S3 regulation and other internal regulations.

Within the framework of the quality care system, we publish the requirements for the products and services which we use in the railway infrastructure and in its repair and maintenance. This is carried out in the form of technical specifications or general technical conditions. Experts from the specialised departments assess the characteristics of the products and services offered by external bodies for use on the railway, their operational reliability, compatibility with existing designs and equipment, and the suppliers' compliance with legal requirements for placement on the market.

For products which pass the assessment, we conclude the technical terms and conditions with the supplier. These then serve as binding technical specifications for future purchase contracts. Compliance with the specified technical conditions is verified on a long-term basis. The form of verification is specified in technical specifications and depends on the level of the quality management system applied by the supplier and the impact of the relevant product on the safety of railway operation. Quality control of each delivery, audits in production plants, etc. are applied. These activities are carried out by employees of the General Directorate and Telematics and Diagnostic Centre.

The expert working group continues to harmonise the systems of the different sectors and to translate the requirements of the 4th EU railway package into the internal rules of Správa železnic. The new guideline SM008 System for the Assessment of the Impact of Products and Services for the Railway Infrastructure on the Safety of the Rail System Pperation will replace all the above mentioned document.

As a contracting authority of public procurement, we also set the rules for quality control of the work to be carried out, including requirements for products, equipment and technology, in the technical conditions of the tender documents. The rules set do not create barriers to the placement of products on the market, but only provide for a transparent, predetermined and open process for all. This ensures and verifies the compatibility, efficiency and usability of products and services, taking into account the specific conditions of the rail system operator. In the context of capital works, maintenance or repairs, only such products from the track management, electrical and energy engineering and communication and signalling equipment sectors that comply with predefined requirements may be put into service on the railway infrastructure. The system in place established thus makes a full contribution to the safety of rail system operation.

We purchase and distribute traction electricity in a responsible way

16.1 Purchase and distribution of electricity

Správa železnic ensures purchase and sale of electricity including all related activities both for its own use and for supply to customers connected to the local distribution system of the railway (LDSž). All processes comply with the requirements of the Act No. 458/2000 Coll., on the Conditions of Doing Business and on the Exercise of State Administration in the Energy Sectors and on Amendments to Certain Acts (Energy Act), and its implementing decrees, in particular No. 408/2015 Coll., on the Rules of the Electricity Market, and Decree No. 16/2016 Coll., on the Conditions of Connection to the Electricity System. The requirements of the Act No. 406/2000 Coll., on Energy Management, are ensured by the regional directorates of Správa železnic within the framework of ensuring the operation and maintenance of the LDSž.

A separate chapter is the supply of traction electricity for the operation of dependent traction, which takes place outside the regime of the Energy Act and is carried out under the supplementary service regime pursuant to the Act No. 266/1994 Coll. on Rail Systems. LDSž is defined at the entry by the transfer points between the networks of LDSž and the parent distribution systems of ČEZ Distribuce, a. s., EG.D, a. s., and PREdistribuce, a. s. The transfer points between these networks are implemented at the voltage levels of low voltage (LV), medium voltage (MV) and high voltage (HV). The supply area of LDSž is defined mainly in the locations of individual railway stations and the interface between the parent distribution system and the traction substation. The OCL itself is no longer part of the LDSž.

Správa železnic is, within the meaning of the Energy Act, partly the final consumer of electricity and partly the operator of the local distribution system and electricity trader, which supplies electricity to external entities on the railway.

16.1.1 Licences for trade, distribution and production of electricity

Správa železnic has been granted licences by the Energy Regulatory Office for electricity trading and electricity distribution. The process of obtaining electricity generation licenses is ongoing for individual generation plants (PV installations only). Ensuring all relevant electricity distribution and sales activities in the LDSž is a major priority for all concerned units of Správa železnic.

Purchase of electricity	Volume [MWh]
Power electricity (MV)	155,498
Power electricity (LV)	45,061
Power electricity (MV, HV) – electrical traction	1,284,039
Total	**1,484,598**

Table 15. *Electricity volumes by voltage level in 2023*

Energy source	% share
Fossil energy sources	53.60 %
Nuclear energy sources	40.95 %
Renewable energy sources	5.45 %

Table 16. *Share of individual energy sources in the total fuel mix of the electricity supplier in 2023*

16.2 Purchase of electricity for traction purposes

The supply of traction electricity is carried out in a transparent manner with the use of the possibility of auction systems on commodity exchanges in accordance with the Public Procurement Act. The auction is carried out by competing the criteria of the supplier's commercial surcharge under predefined conditions by Správa železnic for the supply of electricity. After the conclusion of the contract (contract note via the commodity exchange) with the electricity supplier (trader), a sequential purchase or fixing of the commodity price according to the reference product traded on the wholesale market follows. This achieves an objective market price over a longer time period and eliminates the risk of an instantaneous price fluctuation when auctioning for delivery at one point in time.

The auctions are conducted separately for electricity supply at the MV level (so-called wholesale supply) and for electricity supply at the LV level (so-called retail supply). The resulting electricity price is created by the successive fixation of the price of the reference product on the wholesale market.

16.3 Electricity supply to carriers in electric traction

Správa železnic has been providing traction electrical energy (TEE) consumption billing since 1 January 2019 and to improve this service it has implemented a new method of determining TEE consumption on electric traction vehicles and electric power units (ETV/EUs) using the traction electricity metering system (EMS) in combination with the use of specific consumptions for unmetered trains. These specific consumptions have been newly determined by using measured consumption data for individual train types and therefore reflect more objectively the actual consumption at the traction vehicle collector, including the traction type differentiation. They are further adjusted by a number of coefficients taking into account, for example, technical losses or the season.

Správa železnic, unlike most foreign railway infrastructure managers, integrates all parts of this service by means of its own equipment (control and communication unit including electrometer, GSM-R antenna and GPS), which it installs in coordination with the carriers on the ETV/EU. The same is true for the collection of data from electricity meters and GPS receivers (DCS system), the calculation module for determining train consumption (Hybrid Model), the system for exchanging energy data with foreign partners (Exchange) and the SAP IS-U billing system, all of which are owned by Správa železnic.

All of these systems are developed and operated in compliance with national legislation, but also with internationally recognised UIC, CENELEC and ISO standards and, last but not least, European Commission regulations. Správa železnic is part of the international working groups which compile, revise and support these documents.

Thanks to its own systems and international cooperation, Správa železnic is one of the leading European infrastructure managers ensuring the billing of TEE.

16.4 Other energy and selected commodities (non-traction, water)

16.4.1 General

Správa železnic is the manager of the facilities and buildings, which serve for the operation of its activities. These are administrative buildings, operational buildings, passenger station buildings and technological buildings.

Správa železnic has a certified energy management system according to ČSN ISO 50001:2018 (EnMS), which is evaluated annually within the framework of the EnMS surveillance audit and certified in a three-year cycle based on the results of the EnMS certification audit.

Within the framework of this system, the fuel and energy consumption of the entire energy management of Správa železnic is monitored; the system is focused in detail on selected buildings with higher energy consumption and buildings with planned and implemented reconstruction. In 2023, this concerned 150 station, operational and administrative buildings.

Licence for the production and distribution of thermal energy

Správa železnic holds licences from the Energy Regulatory Office for the production and distribution of thermal energy:

- Thermal energy production: operations in Český Těšín – operational building; Praha Main Station – passenger station building.
- Thermal energy distribution: defined area of the Karviná railway station, Ostrava-Svinov passenger station building, Hradec Králové administrative building, Pardubice administrative building, Pilsen Fire Rescue Corps building.

Suppply of thermal energy on the basis of licences in	2022 (MWh)	2023 (MWh)
Praha Main Stationhl. n., passenger station building	276	161
Karviná-Fryštát, Karviná Mainhl. n. railway Station	39	51
Ostrava-Svinov, passenger station building	74	69
Hradec Králové, administrative building	175	160
Pardubice, administrative building	735	746
Pilsen, Fire Rescue Corps building	127	134

Table 17. *Supply of thermal energy on the basis of licences in 2022, 2023*

16.4.2 Purchase of other energies and selected commodities

The purchase of natural gas is centrally secured through exchange trading. The supplier of gas is Pražská plynárenská, a. s., and the contractual arrangements (contract notes) are negotiated for a group of consumption points managed by individual organisational units of Správa železnic, separately for the category of small consumption and the category of large and medium consumption.

Thermal energy is purchased from regional suppliers (traders) on the basis of contractual arrangements for individual consumption points.

Water (water consumption and sewerage use fees) is purchased from regional suppliers on a contractual basis for individual consumption points. In some cases, water is supplied from wells.

Contractual commitments towards energy suppliers are centrally managed, monitored and regularly reviewed to achieve favourable terms in compliance with the organisation's energy policy.

16.4.3 Supply of other energy and selected commodities

1) Contractual obligations of Správa železnic within the framework of lease relations:

Správa železnic's contractual obligations for energy consumption are largely linked to contracts for the lease of flats and non-residential premises – agreements for the provision of services in connection with the lease:

- supply of thermal energy (purchased thermal energy and thermal energy from the organisation's own sources);
- supply of centralised hot water;
- supply of natural gas (usually the tenant's secondary gas meter);
- water supply (shared sanitary facilities and secondary water meters).

2) Contractual obligations of Správa železnic in other relationships:

The supply of water and natural gas is in some cases also carried out to the premises of foreign entities, usually in the premises of railway stations (secondary water and gas meters).

The supply of thermal energy to the premises of other owners is carried out:

- on the basis of a licence for the production of thermal energy and a licence for the distribution of thermal energy;
- without a licence on the basis of the exemption provided by the Energy Act, Section 3(4b);
- unlicensed internal heat consumption equipment (structurally and technologically connected buildings).

Direct supplies of natural gas to external tenants are carried out individually from different traders, usually in cases where there is no central source of thermal energy in the building.

These direct supplies to external tenants (or the consumption of these commodities) are not recorded by Správa železnic, the tenants make contractual relations separately.

16.4.4 Consumption of other energies and selected commodities

Consumption of Správa železnic is recorded, monitored and evaluated at the level of organisational units and by the Department of Electrical Engineering and Energy within the framework of the Energy Management System (EnMS).

Consumption of other energies and selected commodities	2022 (MWh)	2023 (MWh)
Natural gas	67,326	56,445
Other fuels (coal and lignite, coke, briquettes, propane, light heating oil)	6,888	4,880
Thermal energy	85,653	79,938
of which: purchased	26,556	26,943
generated	59,097	52,995
	2022 (m³)	**2023 (m³)**
Water (water consumption, sewerage use fees) m³	547,768	537,469

Table 18. *Consumption of other energies and selected commodities in 2022, 2023*

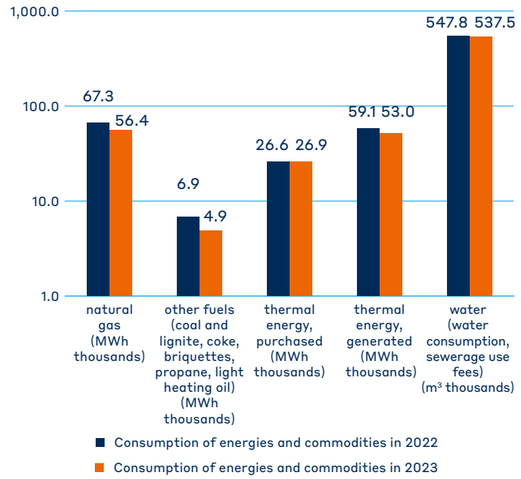


Chart 19. *Total consumption of other energies and commodities in 2022, 2023*

(Note: In the Chart above, a space is used in place of a comma for separation of thousands and decimal comma is used in place of a decimal point for separation of the decimal parts of the values (Czech convention))

We act in a transparent and non-discriminatory manner

17.1 Commercial use of assets

The procedure and rules for the temporary use of state property managed by Správa železnic are set out in internal regulations with maximum emphasis on transparency and non-discrimination. The basic instrument for this activity is a public tender, the definition of which takes into account the satisfaction of passengers' needs. In the case of passenger station buildings in the category "A" stations, the evaluation of tenders may include an evaluation criterion of sustainability with a guarantee according to the ESG criteria. The non-financial benefits of the temporary use of public property are assessed in the context of the public interest.

17.2 Sale of assets

When dealing with immovable property owned by the Czech Republic, which Správa železnic has the right to manage, we proceed in accordance with generally binding regulations, in particular the Act No. 77/2002 Coll., on the Joint Stock Company České dráhy, the State-owned Organisation Správa železnic and on the Amendment to the Act No. 266/1994 Coll., on Rail Systems, as amended, the Act No. 77/1997 Coll., on the State Enterprise, as amended, and internal regulations implementing generally binding regulations into the environment and activities of our organisation. When dealing with passenger railway station buildings, we proceed further in accordance with the strategic material of the Ministry of Transport, Concept for Dealing with Passenger Station Real Estate, which is binding for Správa železnic. Compliance with the established obligations and procedures ensures equal and non-discriminatory access to those interested in the purchase or transfer of immovable property and at the same time maximum transparency of this process, with priority satisfaction of the public interest in the future use of immovable property by the new owners. This applies to transfers to local self-government units, other state organisations or organisational units of the state. A prescribed standard approval process ensuring compliance with the requirements of equal, non-discriminatory access and maximum transparency:

- ascertainment of the permanent unnecessity of the immovable property for the operation and operability of the railway infrastructure, also in terms of future prospects and its transferability through an internal company consultation;
- publication on the Public Administration Portal;
- approval of the Management of Správa železnic;
- discussion at the Ministry of Transport;
- approval by inter-ministerial comment procedure;
- consent of the Government in the form of a resolution;
- local action groups are informed of the intention to transfer ownership to local self-government units or in a public tender.

The basic methods of alienation of immovable property are:

- transfers of ownership for consideration: direct alienation to natural or legal persons in compliance with precisely defined conditions; to local self-government units in the public interest;
- gratuitous transfers to local self-government units or their associations when the legal conditions are met;
- public tenders for the most suitable offer, if the conditions for the above-mentioned methods of disposal are not met, carried out in cases of disposal of immovable property with a price of CZK 1 million or more by electronic auction;
- transfers of the right to manage state property, both gratuitous and non-gratuitous, pursuant to Sections 17c and 17e of the Act No. 77/1997 Coll., on a Sstate-owned Eenterprise, to organisational units of the state, state organisations or enterprises.

Our innovations
Satisfaction with services

18.1 Development of new service facilities

In October 2020, a cross-cutting working group on the design of service facilities was established by decision of the Director General. Its main task is to conceptually cover the handling of station facilities as defined by the Decree No. 76/2017 Coll. on the Content and Scope of Services Provided to Carriers by the Railway Operator and by the Service Facilities Operator. Our aim is a uniform approach to each type of service facilities with clearly defined rules and criteria for their implementation and development.

At the same time, we place an emphasis on ensuring that the use of service facilities is comfortable for passengers, carriers and station users and at a level corresponding to current technological standards.

In 2023, Správa železnic issued the document "Concepts of Service Facilities of Správa železnic". It contains conceptual principles for the development and implementation of those types of service facilities which are not included in previously issued documents, especially the Concepts for the Management of Passenger Station Real Estate. These include: luggage storage facilities, lifting platforms for persons with impaired mobility and orientation, facilities for the operational treatment of carriages, facilities with a source of non-traction electrical power intended for the connection of railway rolling stock, wagon weighbridges, pumping stations, loading and unloading points for the transport of goods. The concepts include not only the types of service facilities currently in operation, but also facilities which, in view of new technologies, will fall under the service facilities regime, such as charging racks for battery vehicles or hydrogen filling stations.

18.2 Smart technologies

The use of smart technologies and processes, among other things, helps to implement the CSR strategy. They improve the efficiency of management and operation of railway stations, reduce operating costs, improve and speed up the service for passengers and all station users. The projects which are currently being implemented or are being prepared for implementation include modern tools and technologies enabling full automation and remote control. An important aspect of this automation is not only the data collection itself, but also the subsequent real-time evaluation of the data.

In the field of energy consumption, one of the main projects is the remote metering of energy consumption (water, electricity, natural gas, heat). The subsequent evaluation of the measured data will allow more efficient management and in the final consequence mainly the reduction of overall consumption. The savings are estimated at 7 % based on similar and already implemented projects.

Other elements under consideration are as follows:

- Installation of photovoltaic power plants on the roofs of operational or passenger station buildings. From this step we hope to reduce the amount of electricity purchased for the operational needs of the buildings;
- Installation of heat pumps and their possible complementation with of intelligent heat storage systems, which can significantly help with heat supply and heating of public areas of railway stations and bus stops;
- Dynamic LED lighting which responds to the intensity of natural daylight in combination with the movement of people in the illuminated area;
- Rainwater retention systems – captured water which would otherwise drain into the public sewer system will be further used to irrigate flowers, plants or turf planted and placed at the station. Besides, filtered water will be used for flushing toilets or as other service water.

In addition to the technologies aimed at reducing energy consumption, we are trying to use the potential of the network of railway stations and stops and to increase its degree of connection to other public or individual modes of transport, such as the construction of P+R, K+R or shared parking facilities for bicycles, e-bikes and e-scooters with the possibility of charging. In cooperation with public transport organisers, we install information systems informing about travel options within the framework of a particular integrated transport system, e.g. about the nearest departures of connecting buses and public city transport, but also mediation of information provided by other entities such as information and tourist centres.

The decision to install the technology is preceded by an analysis which indicates whether the proposed technology is appropriate for the site in terms of the numbers of passengers, the physical layout of buildings and surrounding land, monument conservation and other aspects.

Selected awards won and granted

19.1 Railway Construction of the Year

Every year, Správa železnic organises the Railway Construction of the Year competition, which selects the best implemented railway construction projects, the contracting authority and investor of which is Správa železnic. In individual categories, railway constructions implemented both on the backbone network, corridors and regional lines are evaluated. Emphasis is placed in particular on their operational, economic and social contribution. In 2023, these awards were granted already for the fifth time in a total of 10 categories, with one construction winning the Director General's Award.

www.spravazeleznic.cz/zeleznicni-stavba-roku

19.2 Awards for employees

On the first day of November 2023, the work of employees in several categories was appreciated in the Knights Hall of the General Directorate building. In the presence of Jiří Svoboda, Director General, 25 colleagues were named Employees of the Year, 17 were awarded the Novice Employee of the Year and 21 employees were inducted into the Hall of Fame.

The special Railway Worker of the Year award is granted annually to employees who, at work or in their free time, have saved human life or helped to prevent significant material damage by their dedication, quick reaction or timely assistance. A total of 9 employees have received this award.

Last year, not only Správa železnic celebrated a significant anniversary, but also the railway firefighters. On the occasion of the 70th anniversary of the establishment of the Railway Fire Rescue Corps, a total of 70 employees who made a significant contribution to the activities of the Fire Rescue Corps were awarded also with commemorative medals.

ESG non-financial data 2023

ESG Evaluation	ESG	Indicator name	Section of the Report for 2023	ESG Priority	
Resource Use Score	E	Waste production for individual years 2022-2023 in tonnes	2.1.1	We reduce environmental impacts	Sustainable operation of rail systems
		Percentage of individual components of separated waste in 2023	2.1.1	We reduce environmental impacts	Sustainable operation of rail systems
		Use of regenerated aggregate	2.1.2	We reduce environmental impacts	Sustainable operation of rail systems
		Nature and landscape protection	2.2.1	We reduce environmental impacts	Sustainable operation of rail systems
		Consumption of glyphosate-based substances in liters in the years 2022-2023	2.2.1.1	We reduce environmental impacts	Sustainable operation of rail systems
		Water management and protection	2.2.3	We reduce environmental impacts	Sustainable operation of rail systems
		Air protection	2.2.4	We reduce environmental impacts	Sustainable operation of rail systems
Emission Reduction Score	E	Overview of the composition of energy sources in the total registered number	2.2.4	We reduce environmental impacts	Sustainable operation of rail systems
		Overview of noise abatement measures implemented in 2022-2023 (m	2.2.5	We reduce environmental impacts	Sustainable operation of rail systems
		Frequency of noise barriers implemented by their height	2.2.5	We reduce environmental impacts	Sustainable operation of rail systems
		Overview of line electrification in 2006-2023	2.3	We are driving the green transformation of the railway	Green railway - Sustainable mobility
		Prospective electrification proposal (January 2023)	2.3.1	We are driving the green transformation of the railway	Green railway - Sustainable mobility
		Completed construction projects in the year 2023	2.3.1	We are driving the green transformation of the railway	Green railway - Sustainable mobility
		Ongoing construction projects in the reporting period 2023	2.3.1	We are driving the green transformation of the railway	Green railway - Sustainable mobility
		Railway lines with an approved electrification feasibility study	2.3.1	We are driving the green transformation of the railway	Green railway - Sustainable mobility
		Unification of the traction power supply system to AC 25 kV, 50 Hz	2.3.2.1	We are driving the green transformation of the railway	Green railway - Sustainable mobility
		Overview of power inputs, electricity savings, costs and CO_2 emissions in 2022 and 2023	3.1.1	We improve the energy performance of buildings and stations	Sustainable operation of rail systems
		General overview of savings of electric energy, costs and CO_2 for 2015–2023	3.1.1	We improve the energy performance of buildings and stations	Sustainable operation of rail systems
		Overview of energy and CO_2 savings generated by renovations – completed 2023 or ongoing	3.1.2	We improve the energy performance of buildings and stations	Sustainable operation of rail systems
		PV power plants on the roofs	3.2.1	We improve the energy performance of buildings and stations	Sustainable operation of rail systems
		PV power plants on the brownfields	3.2.2	We improve the energy performance of buildings and stations	Sustainable operation of rail systems
Innovation Score	E	Total capital-expenditure and non-capital-expenditure costs for the environment in 2022 and 2023 (in CZK million)	2.2	We reduce environmental impacts	Sustainable operation of rail systems
		EPC projects	3.1.3	We reduce environmental impacts	Sustainable operation of rail systems
		We engage in research, development and innovation	7.1	We support research and development	Development of innovations
		We manage the Scientific and Technical Collection Journal	7.2	We support research and development	Development of innovations
		Smart technologies	18.2	We change railway stations and stops to “Smart”	Smart and intelligent technologies

ESG Evaluation	ESG	Indicator name	Section of the Report for 2023	ESG Priority	
Workforce Score	S	Registered number of employees by organizational units	6.1	We are a responsible employer	Social and community relations
		Employee structure by highest level of education as of 31 December 2023	6.1.1	We are a responsible employer	Social and community relations
		Age structure of employees as at 31 December 2023	6.1.1	We are a responsible employer	Social and community relations
		Ratio of men to women	6.1.2	We are a responsible employer	Social and community relations
		Gender structure of employees as at 31 December 2023	6.1.2	We are a responsible employer	Social and community relations
		Occupational medical services	6.1.4	Care for employees	Social and community relations
		Safety and health protection of employees	6.1.5	Care for employees	Social and community relations
		Remuneration of employees and provision of benefits	6.1.6	Care for employees	Social and community relations
		Employee training	6.1.7	Care for employees	Social and community relations
		We conduct a dialogue with trade unions	6.2	Care for employees	Social and community relations
		Our employees help	6.6	Our employees help	Social and community relations
Human Rights Score	S	Equal opportunities	8.1	Corporate Principles and Ethical Conduct Policy	Social and community relations
		Barrier-free railway	8.2	We promote diversity and equal opportunities	Social and community relations
		Support programme for people disadvantaged in the labour market	9.8.1	We promote diversity and equal opportunities	Social and community relations
		Number of engagements of disadvantaged persons in the labor market	9.8.1	We promote diversity and equal opportunities	Social and community relations
		Social categories of the qualification system	9.8.2	We promote diversity and equal opportunities	Social and community relations
Community Score	S	We conduct a dialogue with professional associations and unions unions	6.3	We promote sustainable mobility	Green railway - Sustainable mobility
		We conduct an open dialogue with communities	6.4	We support cooperation with communities	Social and community relations
		Supporting small and medium-sized enterprises (SMEs) as subcontractors	6.4.2	We support cooperation with communities	Social and community relations
		Cooperation with schools	6.4.3	We innovate our recruitment strategy	Social and community relations
		Prevention and safety campaigns	9.1	We are beneficial for society	Social and community relations
		Crisis communication	9.2	We are beneficial for society	Social and community relations
		Contact centre	9.3.1	We are beneficial for society	We bring useful solutions to carriers and passengers
		Information centres	9.3.2	We are beneficial for society	We bring useful solutions to carriers and passengers
Product Responsibility Score	S	Intensive enhancement of railway crossing security levels	4.1.1	We operate the rail system in a safe way	Transport safety
		Railway operation and rail transport safety system	4.1.2	We operate the rail system in a safe way	Transport safety
		We are introducing the European Train Control System (ETCS)	4.2	We operate the rail system in a safe way	Transport safety

ESG Evaluation	ESG	Indicator name	Section of the Report for 2023	ESG Priority	
Management Score	G	Selected quantitative and qualitative operational performance indicators in the 2023 reference period	11.1	Governance and management of the organisation	Organisation administration and management - Governance
		Code of Conduct	12.1	Corporate Principles and Ethical Conduct Policy	Organisation administration and management - Governance
		Code of Compliance	12.2	Corporate Principles and Ethical Conduct Policy	Organisation administration and management - Governance
		Protection of personal data	13.1	Corporate Principles and Ethical Conduct Policy	Organisation administration and management - Governance
		GDPR training	13.2	Corporate Principles and Ethical Conduct Policy	Organisation administration and management - Governance
		Application of the elements of responsible procurement	14.1	Corporate Principles and Ethical Conduct Policy	Organisation administration and management - Governance
		Objem elektřiny podle napěťových hladin	16.1.1	Governance and management of the organisation	Organisation administration and management - Governance
		Licences for trade, distributionand production of electricity	16.1.1	Governance and management of the organisation	Organisation administration and management - Governance
		General	16.4.1	Governance and management of the organisation	Organisation administration and management - Governance
		Consumption of other energies and selected commodities	16.4.4	Governance and management of the organisation	Organisation administration and management - Governance
Shareholders Score	G	Founder of Správa železnic	1.2	Founder of Správa železnic	Organisation administration and management - Governance
CSR Strategy Score	G	Social responsibility of Správa železnic	1.1	Governance and management of the organisation	Organisation administration and management - Governance
		Sustainability management at Správa železnic	10.1	Governance and management of the organisation	Organisation administration and management - Governance
		Caring for railway heritage	9.9	Social responsibility of the organisation (CSR)	Organisation administration and management - Governance
		Railway Construction of the Year	19.1	Social responsibility of the organisation (CSR)	Organisation administration and management - Governance

List of abbreviations

AC	Alternating Current
AČR	Army of the Czech Republic
BIM	Building Information Management
BTS	Base Transceiver Station
CER	Community of European Railways and Infrastructure Companies
CO_2	Carbon dioxide
CTD	Technology and Diagnostics Centre
DC	Direct Current
DCS	Distributed control system
DMI	Driver Machine Interface
DTM	Digital technical map
EnMS	Energy management system
EPC	Energy Performance Contracting
ERTMS	European Rail Traffic Management System
ERÚ	Energy Regulatory Office
ESG	Environmental, Social, Governance sustainable investing in the environmental, social and economic governance sectors of the society
ESRS	European Sustainability Reporting Directive mandatory EU standards to which companies must adapt their ESG reporting within the framework of the Corporate Sustainability Reporting Directive
ETCS	European Train Control System
ETF	The European Transport Workers' Federation
ETV	Electric traction vehicle
EU	Electric unit
EU	European Union
EVC	European vital computer
FRMCS	Future Railway Mobile Communication System
GDPR	General Data Protection Regulation
GP BK	Geometric position of the continuous weld rail
GRI	Global Reporting Initiative
GŘ	General Directorate
GSM-R	Global System for Mobile Communications – Railway
HR	Human Resources
HSL	High-speed line
HV	High voltage
HZS	Fire Rescue Corps
ICT	Information and communication technologies
IZS	Integrated rescue system
KOP	Fitness recovery stay
kW	Kilowatt, unit of power
kWh	Kilowatt-hour, unit of work
LDSž	Local distribution system of the railway
MD	Ministry of Transport of the Czech Republic
MU	Emergencies (accidents and incidents)
MV	Medium voltage
NN	Low voltage
NÚKIB	National Cyber and Information Security Agency
OBU	Onboard unit
OHS	Occupational health and safety
OPDP	Office for Personal Data Protection
OŘ	Regional Directorate
P+R	Park & Ride (car parking area)
PC	Personal Computer
PDLM	People disadvantaged in the labour market
PIMO	Persons with impaired mobility and orientation
PKS	Corporate Collective Agreement
PPK	Spatial location of the track
PV	Photovoltaic power plant
PZZ	Level crossing safety device
RCS	Remote Control of Signalling
RES	Renewable energy sources
RFC	Rail Freight Corridors
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
SDG	Strategic Development Goal
SFC	Static frequency converter
SFDI	State Fund for Transport Infrastructure
SG	Strategic goal
SMS	Safety management system
SNCF	Société nationale des chemins de fer français
SPVs	Special powered vehicles
SSZ	Construction Management West
ST	Strategic target
SŽ	Správa železnic, state-owned organisation
TA CR	Technology Agency of the Czech Republic
TEE	Traction electrical energy
TEN-T	Trans-European Network – Transport
TKP	Technical qualitative conditions
TNS	Traction substation
TSI	Technical Specification for Interoperability
UIC	International Union of Railways
UN	United Nations
UNIFE	Union des Industries Ferroviaires Européennes
ŽESNAD	Association of Railway Freight Carriers of the Czech Republic
ŽST	Railway station

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Contact data

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Incorporation date:	1 January 2003
Legal form:	state-owned organisation, registered in the Commercial Register administered by the Municipal Court in Prague, Section A, File No. 48384
Identification number:	70994234
VAT identification number:	CZ70994234
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Správa železnic, státní organizace, registered
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by the Municipal Court in Prague, Section A,
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