



# ANNUAL REPORT 2023

# CONTENTS

Word of welcome	3
Public Service Contract	5
Bus and Trolleybus Operations Directorate	7
Railway Operations Directorate	14
Legal and Human Resources Directorate	24
Development and Coordination Directorate	34
Tourism and sales	42
Strategic and Procurement Directorate	45
Economic Directorate	48
Security Directorate	54
Corporate Relations Office	58
‘A’ BALANCE SHEET Assets	69
‘A’ BALANCE SHEET Liabilities	71
Income statement (total cost method)	73

# WORD OF WELCOME



2023 was characterised in BKV's life by the completion of paradigm-shifting major projects, as well as by smaller steps taken towards stable development.

The most important event affecting both Budapest transport and our company was undoubtedly the reconstruction of metro line M3, the largest public transport project of the last decade.

On 22 May, with the inauguration of the Nagyváradi tér and Lehel tér stations, a completely renewed, a modern and barrier-free line was opened to the more than half a million passengers who take the M3 metro daily. During the reconstruction, new rails were installed on the entire line, and the stops were renovated, as were the electrical, mechanical and safety systems. The entire line is now barrier-free, with an inclined elevator in the inner-city section: a novelty which has never before been used in Hungary.

This renovation also marked the end of the success story of replacing metro lines by buses. During the five and a half years of work that began in November 2017, our company's bus division provided replacement for the missing metro trains on the closed sections, without any major disruptions. On average, 154 drivers sat behind the wheel daily, in order to minimise the impact of the renovation on passengers.

A smaller-scale investment, but one that resulted in a significant increase in passenger comfort, was the partial renovation of the tram line between Széll Kálmán tér and the Hűvösvölgy terminus. Thanks to this, it is now possible to reach Hűvösvölgy with the modern, low-floor, air-conditioned CAF trams.

The gradual entry into service of the new Solaris-Skoda Trollino trolleybuses has also increased the number of modern vehicles in the rubber-tyre sector, which are better able to meet passenger needs.

BKV is a reliable partner not only as a service provider, but also as an employer, which is why our company has been able to maintain its advantageous position in the labour market. Thanks to an average 15 percent base salary increase in 2023 and extensive recruitment activities, we had the necessary workforce available at all times, despite the high turnover in certain positions.

In addition to providing high-quality service and stable employment, we also do our utmost to ensure sustainable operations. In 2023, we were once again awarded the title of "Energy Conscious Company" in the Energy Efficiency Excellence Competition launched by the Virtual Power Plant Programme, for the seventh time. Thanks to the energy-saving measures implemented in the winter of 2022

and summer of 2023, we achieved total cost savings of HUF 2.4 billion. After our headquarters in Akácfa utca and the Kelenföld depot, we have also installed a state-of-the-art solar system in the Hungária bus depot and the Cinkota bus garage. This will significantly reduce not only our carbon dioxide emissions, but also our costs.

In addition to ensuring day-to-day operations, we also promoted public transport through social responsibility and cultural outreach programmes. We participated in the “Budapest 150” celebrations, as well as several other external events. We held open days at our sites, where we welcomed thousands of visitors.

I can confidently say that thanks to the loyalty and expertise of my colleagues, the commitment of our management, and the good relationships maintained with our owner and our client, we successfully closed the year 2023 as well!

Tibor Bolla  
CEO



# PUBLIC SERVICE CONTRACT

Our company provides scheduled public passenger transport services, based on the Public Service Contract concluded with Centre for Budapest Transport (BKK) on 1 January 2021.

According to the Public Service Contract, BKK orders the scheduled transport service, setting the framework for all quantitative and qualitative requirements, as well as detailed rules for public service, including the rules for the compensation of costs.

The client's expectations for the year and the related financing conditions are set out in the Annual Agreement, which is part of the Public Service Contract.

The provision of an adequate quality of service is regulated by the quality requirements formulated by BKK Zrt. and the application of the related motivational/sanctioning tools. These include the Bonus/Malus values applied in the SLA (Service Level Agreement, quality level measurement system and service level agreement) system, as well as penalties for non-performance based on specific legal grounds.

The SLA system includes the cancellation indicator, the traffic safety (accident) indicator, the punctuality indicator, the technical, aesthetic and passenger comfort indicators for vehicles and stations, and the passenger information reliability indicator. The penalty system consists of 57 penalty points, which can be sanctioned under different legal titles.

The Bonus/Malus percentages for to the SLA indicators listed above were changed in 2023 compared to the previous year, resulting in a reduction in the extent of the Bonus achieved by our Company as a result of meeting the quality requirements (compared to what it would have been had the percentage values remained unchanged). In addition, BKK Zrt.'s options for imposing penalties was further expanded.

As a result of the changes, there was a decrease in the value of the company's Bonus (previous Bonus of HUF 335,759 thousand, followed by a Bonus of HUF 136,093 thousand) and in the value of penalties (previously HUF 59,733 thousand, followed by HUF 49,130 thousand) compared to the previous year. Due to the above, in 2023 the financial result of BKV Zrt. after evaluating the quality requirements was HUF 86,963 thousand.

Our Company fulfilled its reporting obligations in accordance with the provisions of the Public Service Contract. By preparing monthly, cumulative quarterly, and annual public service reports, as well as by answering regular questions from its customers, BKV Zrt. reported on the provision of the ordered public service and its economic aspects.



# BUS AND TROLLEYBUS OPERATIONS DIRECTORATE

## Changes in the vehicle fleet

The vehicle fleet of buses and trolleybuses underwent significant changes also in 2023. In order to serve traffic demands at a higher and more modern level – much like in 2022 – our Company leased 11 low-floor modern articulated Modulo M168d buses, to meet the needs of the travelling public. These vehicles have modern air-conditioned passenger compartments, and environmentally friendly EURO VI engines. In the same year, 2 second-hand Solaris Urbino 10 type midi buses also entered service. The completion of the metro replacement works and the expiration of the lease agreement for the Volvo-Alfa Cívís 12 buses allowed us to withdraw further high-mileage and now obsolete vehicles. As a result of these changes, the bus fleet changed from 963 buses on 1 January 2023 to 870 buses by the end of the year.

Thanks to the 135 new solo and articulated Mercedes-Benz Conecto buses placed into service in 2022, as well as the phasing out of the fleet of ageing and obsolete vehicles, there was a significant improvement in the bus sector's availability and a reduction in technical trip cancellation rates, which demonstrates an improvement the vehicles' operational performance, making the Mercedes-Benz Conecto buses placed into service one of the most reliable models in our vehicle fleet.

The trolleybus sector saw a continuation of the fleet renewal process that began at the end of the previous year. In 2023, a total of 30 new low-floor articulated 4th generation Solaris-Skoda Trollino 18 vehicles and 12 new low-floor solo 4th generation Solaris-Skoda Trollino 12 vehicles entered service. As a result of placing 42 new trolleybuses into service, it became possible to withdraw the mostly high-floor Ikarus 280 T (GVM), Ikarus 435 T, as well as the old and obsolete Ikarus 412 T and used MAN NGE 152 trolleybuses from the fleet. Based on the vehicle additions and withdrawals, the trolleybus fleet numbering 141 vehicles at the beginning of the year was changed to 142 vehicles by the end of the year.

The average age of the vehicle fleet shows a slight increase for buses – from 10.72 years to 10.97 years – due to the absence of new vehicle purchases. For trolleybuses, however, the previous steadily increasing trend was reversed, with the average age of the fleet decreasing from 16.35 years to 8.78 years. Here, the major improvement was due to the introduction of 6 new trolleybuses that was started in 2022, followed by 42 new trolleybuses in 2023.

In the bus and coach sector, there was no significant change as to passenger comfort, in the absence of new vehicle purchases. The proportion of vehicles with air conditioning in the passenger compartment continued to increase slightly (to 97.9%). Regarding the trolleybus sector, however, the arrival of new vehicles not only decreased the average age of the fleet, but it also resulted in a significant qualitative improvement in passenger comfort. By the end of the year, 92.9% of the total fleet was low-floor, and the proportion of vehicles with air conditioning within the fleet increased to 76.7%.

In line with the previously set objectives to rejuvenate the vehicle fleet, a public procurement procedure for a long-term lease of 65 maxi-midi buses (+20 options) was prepared in 2023. If the procedure is successfully concluded, the new vehicles could be phased in, to enter traffic, starting at the end of 2024 or the beginning of 2025.

## Metro replacement tasks

The replacement of metro line M3 began on 4 November 2017, at the northern section between Újpest-Központ and Lehel tér. In five and a half years, two main phase changes took place, and finally, in the early afternoon of 20 March 2023, a metro replacement bus ran for the very last time on a weekday. On weekend days, replacement buses ran for the last time on Saturday, 6 May and Sunday, 7 May. However, metro trains still did not stop at Lehel tér and Nagyvárad tér until 22 May. These locations were used as turning stations during the previous replacement phases, and were accessible via replacement buses and alternative transport services.

The operation of the metro replacement buses required extremely frequent service to replace one of the longest public transport lines in the capital, which also carries the highest passenger traffic: on weekdays, the average interval between services was 45 seconds during peak hours. This had to be resolved via the design of the replacement bus route, including significant modifications of busy intersections such as Nyugati tér or the Pest bridgehead of Árpád híd. The metro replacement lines saw an average of 60-70 buses operating on weekdays (depending on the phase), covering more than 26 million km in 5.5 years, with over a thousand different timetables.

In addition to the temporary bus replacements, the continuous provision of social care for drivers was also a priority: we installed temporary containers at a total of 10 locations, sometimes even in multiple locations at major intersections.

In 2017, the launch of the M3 metro line replacement required a number of measures affecting the vehicle fleet. In addition to the 23 Mercedes Conecto G buses already in service under the availability contract with Inter Tan-Ker Zrt., we exercised the optionally available quantity to enter an additional



31 articulated buses of the same type into service. These formed the backbone of the replacement fleet throughout the entire period. In addition, the sector reactivated a total of 41 Ikarus 280 and Ikarus 435 vehicles, in order to meet increased scheduling needs, with the last of these vehicles being phased out simultaneously with the arrival of new vehicles, at the end of 2022.

In order to provide the necessary personnel, the Bus and Trolleybus Operations Directorate introduced outstanding recruitment and training efforts: the number of bus drivers and driver trainees hired during the metro replacement period exceeded 1,750 persons, of whom nearly 50% were trained by ATÜI. During the metro replacement period, drivers working on the replacement buses completed more than 2 million working hours. Both BKK and BKV took a number of measures to assist drivers in their work. Prior to the major phase changes for replacements, a series of centrally organised and operated test drives were introduced to help familiarise a wide range of drivers with the routes, their traffic technology, terminal arrangements and other features. In addition, on-site driver supervision was provided at terminals.

## **Staffing**

In 2023, the number of drivers decreased to such a level that even after the M3 metro replacement was concluded, trip cancellations were necessary due to staffing issues, although at a lower rate than at the end of 2022.

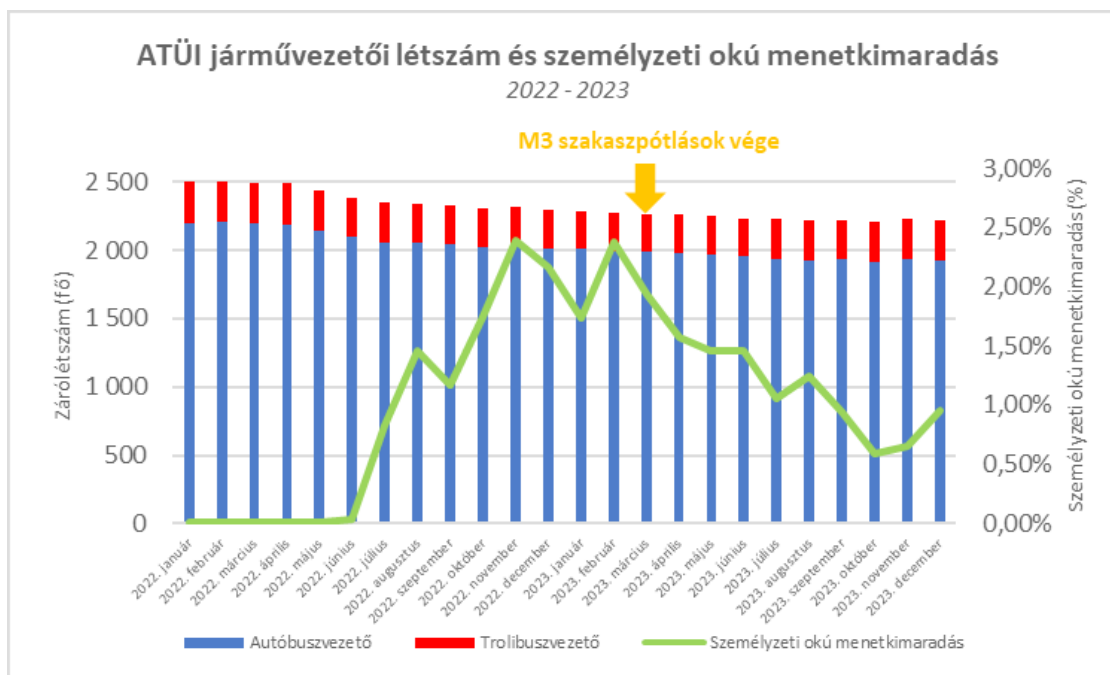
Minimising personnel shortages while ensuring legal employment conditions posed a daily challenge for site traffic services. For this reason, the additional remuneration previously introduced for incentivising and recognising drivers' performance continued in 2023, for drivers working exceptionally long hours (overtime) per month.

The age profile of drivers in the rubber-tyre sector continues to increase, with 61% of the workforce being over 50 years old.

## **Employment of temporary staff**

In an environment of constantly fluctuating performance expectations and driver shortages, the driver assistance system is a key enabler of traffic management and increases the flexibility of a system with scarce human resources.





## Driver succession, recruitment and training

To ensure the succession of drivers, we continuously recruit drivers and trainee drivers through all available “channels”: our social media pages, internal newsletters, leaflets, the internal and external surfaces of the vehicles, newspaper advertisements, and in person at job fairs. In the summer and autumn of 2023, a total of 48 qualified drivers applied to our company through an internal referral system that offered more favourable conditions. In addition to recruitment, scheduled driver training was ongoing: in 2023, we launched a total of 26 new driver training courses.

As a result of the legislative changes, direct training from category B to D began in September 2023, which led to a significant increase in the number of trainees. By the end of December, nearly 160 bus driver trainees with a category B licence joined the sector.

# Implementing the expected reduction in the number of available positions

During the 2023 business planning process, as a result of the following effects, BKK expected BKKV (and thus ATÜİ) to show a reduction in the number of available positions of other physical staff in the 2023 plan.

- The arrival of new buses (100 buses on long-term lease + 35 self-owned) and new trolleybuses (48 owned by BKK), made it possible to remove the vehicles that were in the worst technical condition from the fleet while also reducing fleet diversity. Modern vehicles have a lower rate of technical failures and can be operated under more favourable maintenance conditions than the older, obsolete vehicles of the fleet.
- With the completion of the metro replacement project in 2023, the bus sector (inevitably) had to calculate with a reduction effect in vehicle deployment and performance.

In the light of the above, it was necessary to plan for a reduction of available positions equalling 150 persons from 1 July 2023. This was completed in the most humane and cost-effective way possible during the year, improving the efficiency and economical character of the bus sector.

## Infrastructure

The infrastructure of the Bus and Trolleybus Operations Directorate supports the continuous and safe provision of public transport services at 5 sites, around 75 terminals, and 11 major and several minor intersections.

Despite their age, the buildings and structures are safe and reliable, thanks to the active operational support activities of the sector. The rubber-tyre sector implemented minor, isolated aesthetic enhancements as well as major improvements in working conditions at the sites and terminals, in addition to the planned maintenance and ad hoc repairs. Among these, the aesthetic renewal of the mechanical systems of three terminals is noteworthy. In 2023, much like in previous years, a number of social rooms were renovated, and fast gates, air conditioning and new heating systems were installed at the sites, replacing some old, worn-out equipment (that was no longer economically viable to repair). New resin floors were also installed around several of the service shafts.

In addition to the renovated terminals, the quality of social care for staff was improved by repainting, replacing floors and windows at several locations, and by replacing interior furnishings in eight

terminals. We were able to replace worn-out heating equipment with more energy-efficient and reliable units in five terminal lounges.

Energy efficiency measures also continued at the bus station sites. High-consumption halogen, sodium and neon lamps were replaced by modern LED light sources in the repair halls, service shafts, offices and warehouses. With the measures supporting environmental protection, we improved the capacity of the existing water recirculation system in the Kelenföld Division, and a new oil separator was installed in the South Pest Division.

## **Troli90**

On the occasion of the 90th anniversary of trolleybus transport, BKV organised an international conference on the future and sustainable operation of the sector, together with the Szeged Transport Company and Mobilissimus mobility planning workshop, between 7 and 9 September. The three-day event featured presentations and workshops by Hungarian and foreign experts in public transport in Budapest and Szeged. As a closing event of the conference, participants were invited to take a nostalgic trolleybus ride to the Pongrácz út site, where they could take a short tour of the plant and view some special pieces of the trolleybus fleet.

## **Year-end services, services on public holidays**

Continuing the tradition, during the Advent period in 2023, Santa buses again operated on lines 105 and 210, as well as in the South Pest region even on days not listed in the timetable. For the first time, an illuminated bus glowing in BKV's colours was used to celebrate the end of the year holiday season. Among the newest vehicles in the fleet, a solo and an articulated Mercedes Conecto received festive lighting and decorations, further expanding BKV's illuminated vehicle fleet.



# RAILWAY OPERATIONS DIRECTORATE

In order to ensure the continuous and safe provision of public transport service, the Railway Operations Directorate provided for the sustenance (maintenance and repair) of public railway vehicles and infrastructure facilities, and ensured the establishment and smooth working of the appropriate operating order, the proper conditions for the safety of life, property and operations, as well as the maintenance of railway structures and vehicles, for keeping them in a safe condition and for their technical supervision. In addition, it also contributed at operational level to the preparation of investment projects affecting public transport in Budapest.

The operating departments undertook every effort to address the procurement difficulties resulting from the adverse effects of the war, and these measures proved to be effective.

## Operational performance

The tram and metro sector provided a total of 9,481 million available passenger capacity kilometres (ASK), with more than 3.3 million completed trips. Within the tram sector, we were able to further increase the number of lines partially served by low-floor vehicles (50; 56-56A), resulting in a significant improvement in service quality. Following the reconstruction that began in November 2017 on metro line M3, passenger traffic resumed on the entire line from May 2023, resulting in a 20% increase in metro sector performance in 2023 compared to the base period.

In addition to the public service activity, heritage trams provided nearly 477 hours of service in 2023 (typically on weekends and during the Advent period), averaging 79.5 hours per month.

Within the tram sector, trip cancellation rates show a steadily improving trend, decreasing to 0.4% per year on an average.



## Changes in the railway vehicle fleet

In 2023, the railway passenger vehicle fleet comprises 1,029 vehicles of 14 different types. The tram sector operates ten main types, with the metro sector operating four.

The Company's tram sector provides service on 35 tram lines with a total of 600 tram vehicles, while the cogwheel line operates 14 cogwheel vehicles (7 railcars and 7 trailers) to serve passenger transport.

The average lifetime of the trams in the BKV assets system (not including the CAF vehicles owned by BKK) is 37.95 years, which exceeds their planned useful life by 7.95 years. However, this does not cause an increase in passenger and traffic safety risks, due to the strict maintenance system and practices.

The average age of a metro passenger vehicle is 8 years, while the average age of MILLFAV vehicles is 49.7 years.

In terms of passenger comfort, the railway passenger vehicle fleet has improved significantly in recent years. By 2023, the proportion of low-floor vehicles (in terms of number of units) reached 53%, and the proportion of air-conditioned vehicles reached 27%.

In 2023, 14 Tatra trams were upgraded simultaneously with major overhauls. 1 ICS and 1 KCSV7 underwent major overhauls, and 6 TW6000 units were refurbished. In addition, we completed the overhaul of 1 cogwheel train, and continued to carry out the 16-year overhauls of Combino trams, and the 560,000-km overhauls of CAF trams. In order to better serve our passengers, NFC stickers were added to our vehicles, related to the mobile ticketing development scheme.

Measures to improve working conditions were also a priority in the modernisation of vehicles.

As part of the "Track-Based Vehicle Manufacturing Action Plan", the replacement of the cogwheel and the MILLFAV vehicles is currently being tendered (and may be launched once the necessary funding is available). If implemented, this will also provide a modern fleet of vehicles meeting all requirements. The Authority issued a preliminary type-approval in principle for both new vehicles.

## Evolution of the infrastructure asset system

In 2023, about 98,259 metres of rail were grinded to ensure travel comfort and reduce noise, and 2,515 arc welds and 198 thermit welds were made along 805.9 track metres. In addition to the positive technical and environmental effects, these activities also have a positive impact on the Company's finances, saving BKV a total of HUF 448 million per year.

The overall technical condition of infrastructure equipment and assets for the tram sector improved slightly, from 46% in 2022 to 48% by the end of 2023.

Daily tram traffic ran on a rail network with a total length of 355.5 km. In 2023, two major projects were completed as an extension of the transport conditions of the CAF trams. One was the renovation of the level crossings, certain sections of track, and power supply on Line 50, which started in 2022, while the other was the renovation work on Line 56, including tracks, power supply, overhead line poles and more critical stops.

Track maintenance works carried out on metro lines in 2023 were completed in order to ensure traffic safety, prevent the introduction of slow signals, and improve passenger comfort.

On metro line M1, between Széchenyi-fürdő and Mexikói út, a total of 1392 linear rail metres of worn rails were replaced.

On the surface section of metro line M2, a total of 2,336 linear rail metres of worn rails were replaced on the left track in both rail sections, and parts were replaced in several shunts.

In the 0.8 kV output cells operating at the traction stations, safety covers were installed to increase protection of life and property.

Major lighting repairs (replacements with LEDs) continued on the buildings of metro lines M1, M2 and M3, and the repair and replacement of the entrance gates of the Pillangó utca and Blaha Lujza tér stations was completed without any issues.

Last year, we carried out enhanced maintenance work on 1 high-rise and 3 low-rise escalators on metro line M2. For 12 high-rise escalators at three metro stations, we installed new stair carriages to reduce the risk of malfunctions. In addition, we also designed and implemented a temperature monitoring system to monitor the heating of brake discs and gearboxes for these escalators, giving us more reliable status updates of the drive system's operation. In case of a malfunction, the system stops the escalator, preventing further damage caused by overheating.

On metro line M3, we carried out high-level maintenance on 5 low-rise escalators. Following the commissioning of 16 high-rise and 3 low-rise escalators, 3 inclined elevators and 9 regular elevators at six stations on the central section of metro line M3, as well as 1 elevator in the underground station connect-

ed to the Határ út metro station, maintenance of the equipment and warranty administration continued continuously during the warranty period, in order to ensure safe operation.

A significant part of the infrastructure assets for metro line M3 was fully renovated as a result of a major reconstruction project that lasted nearly five and a half years and was completed on 22 May 2023. As a result, the overall technical condition of the line increased from below 60% to 80%. A strategic objective of the infrastructure reconstruction project was to improve the competitiveness of the metro line M3 (north-south) – a part of the capital's public transport network – compared to private transport. Not only was this objective successfully achieved, and the project also improved the connections between functional units within the city and the region.

On metro line M4, we continued to pay special attention to the management of escalator failures under warranty after the warranty period. In addition to scheduled maintenance works, safety and fire protection maintenance was carried out on an additional 8 escalators.

## Measuring tram

In 2016, we started the conversion of a Ganz articulated tram into a special diagnostic target vehicle that will allow us to carry out comprehensive measurements twice a year on the entire line network, thus providing a complex evaluation of the track network. In addition, the measuring tram also provides the option to measure and test the elements of the overhead line system, by using an additional measuring system.

At the end of 2022, 2 laser gauge units suitable for track gauge measurement were installed on the vehicle, with a test run period completed in parallel with the planned measurements. After the successful completion of the test period, four more hardware overhauls were carried out in December 2023, completing the track geometry measurement system. The range of measurements that can be performed may be further developed, depending on available resources.

## Other activities

A review of the company's Railway Safety Policy and an update of the Railway Safety Strategic Objectives were completed.

The rail sector carried out 13 inspections and 3 chain inspections, during which it formulated 13 recommendations and one finding in order to improve rail safety and regulatory compliance, and ensure

safe operations. As a result of our proposal, a rail traffic study and risk analysis review of the Koppány utca connecting track area was carried out to justify the phasing out the signalling equipment.

The chain inspections were carried out on a regular basis by requesting the work authorization documents of employees working in railway safety positions on a daily basis, and by carrying out random inspections on the official documents authorising them to drive vehicles on the premises. Regarding employees in railway safety positions at the Tram Operations Directorate, we evaluated the training curriculum for training regarding the Safety Management Manual, as well as the implementation and documentation of the referenced training courses.

The VBI carried out an operator investigation into a railway accident/incident, at the request of the Transport Safety Organisation. To ensure railway safety, its staff regularly participated in discussions and consultations on the following projects: The New Danube Bridge project, the New Transport Museum project, transport development of the Városliget (City Park) and its surroundings – Szegedi út overpass project, “Körvasút” (Ring Railway) environmental improvement project, modernisation of HÉV lines H6/H7 and their extension to Kálvin tér, shifting upgrades at several points of the tram network.

## **Application of the science-based “Continued Operation Protocol (COP)”**

In 2023, we carried out 213 COP inspections affecting the tram sector. Our application of COP provides an opportunity for operators to objectively qualify and continue to operate assets that exceeded their useful life, so that upcoming asset replacements can be deferred, should this become necessary due to resource constraints. Without applying the COP procedure, it would have been justified to withdraw a number of vehicles and infrastructure elements beyond their planned lifetime, and replacing them to offset the impact on the public transport service would have cost an estimated HUF 128.4 billion in the vehicle sector and HUF 41.9 billion in the infrastructure sector, calculated at market value.

## **City Rail 2023**

The Railway Operations Directorate, in cooperation with KTE and academics from universities training professionals, successfully organised the City Rail 2023 Scientific Conference on 6-7 September 2023 in Balatonfenyves. Among the more than 190 registered participants, Hungarian and foreign experts and partner companies were present, representing public transport service providers of various Europe-

an capitals or European companies interested in vehicle manufacturing, infrastructure construction and transport development. The number of participants, which has been increasing year after year to well over 120, confirms the success and justification of this scientific conference series.

## **Training courses**

In 2023, twenty-nine railway apprenticeship courses were launched for understaffed positions in the metro sector, with a total of 176 new hires and company employees starting their studies. In 2023, 148 persons successfully completed the training course, which concluded with an official examination. Significant training capacities were also tied up by organising and conducting periodic and refresher training sessions. Regarding the M3 line, 94 drivers (new hires and temporary employees) were trained in 92 hours of sessions in driver simulator training.

In the metro sector, 8 communication training sessions were held for the full-time train- and passenger traffic controllers of the four metro lines. A total of 106 participants attended the training sessions, one of the aims of which was to further strengthen the service-oriented approach.

Within the tram sector, driver training is ongoing. In 2023, a total of 85 tram drivers were fully trained (of whom 70 were full-time drivers, 8 were university students and 7 were internal employees). Additional drivers for 7 cogwheel and 4 rail-road trucks also obtained railway vehicle driver certificates. Including regional training needs (e.g. type and line knowledge), a total of 597 persons participated in 117 railway operations training courses.

The EcoDriving programme, a course for training energy-efficient driving, continued to play a prominent role in the training of tram drivers. In 2023, 212 persons participated in this training course on the T5C5K and CAF simulators, for a total of 1,868 hours.

## **Higher education dual training**

Dual training has now become a priority, as from the Company's point of view, it is vital to employ workers with specific skills. The students contracted within the framework of the dual training programme will receive practical training in BKV's railway operation departments in parallel with their higher education studies, which will allow them to join the Company as fresh graduates with the appropriate qualifications upon completion of their studies. In December 2023, 23 students from three universities joined BKV in this way.



## **Secondary education dual vocational training**

In the autumn of 2023 (for the 2023/2024 school year), nearly 70 vocational interns completed their practical training in railway operations departments, in nine different professions.

## **Driver training for university students**

In order to integrate the training of tram drivers into the training of university students pursuing higher education technical studies, the Company contacted higher education institutions to perform a preliminary needs assessment and to evaluate the possibilities.

Within the framework of the cooperation agreement concluded with Széchenyi István University of Győr in 2022, the training integrated into the education of transport engineers – and providing an opportunity to obtain a tram driving licence – continued in 2023. After passing the official exam in 2022, 2 persons signed a contract as assistants at the beginning of 2023: 1 person at Buda Traffic and 1 person at North Pest Traffic. The training course continues to be popular with students, and in 2023 17 students took the elective course “General professional expertise in tram transport”, 6 of whom passed the official exam and completed the driver training. Of the drivers who graduated, 1 person is a dual university student employed by the Railway Operations Directorate. Given its success, the programme will continue in the next academic year as well.

## **3M Project**

In April 2023, the Railway Operations Directorate started to develop the “3M” project, which aimed to attract, retain and motivate labour force. The project also included vocational education and training, which was addressed in a separate sub-project entitled “Review of the training and vocational education situation in the field of labour recruitment and staff retention in the Railway Operations Directorate”.

## Operation, support and development of management systems

In 2023, the following external audits were carried out on the sites of the Railway Operations Directorate:

System	Date	Locations
IIR	15-16 June 2023	M4 metro depot Kelenföld tram depot
EMAS	15-17 November 2023	Budafok tram depot M4 metro depot Szépilona tram depot (new)

2023 external audits of sites (ROD)

In 2023, the scope of EMAS was expanded to include the Szépilona tram vehicle depot.

## Measures taken to reduce energy costs

Energy procurement, performance management: in order to reduce significant energy consumption and costs, our Company pursues complex, conscious and professional energy management activities. In 2023, we used nearly 571.1 GWh of energy, representing a cost expenditure of nearly HUF 33.72 billion at current prices. Energy is used at 1,038 points of use, which then supply energy or drinking water to 138 external parties.

For the 2023-2024 winter period – learning from the experiences of the Company's measures applied in the previous year's heating period regarding the energy crisis caused by the war situation – the CEO's Directive on applicable energy efficiency measures and Company rules was issued on 15 November 2023. It set out the energy-saving measures to be applied to the Company's buildings and sites, with respect to their specific characteristics. The most commonly applied measures involved modifications in operating temperature, heating operating time, and the size of the heated areas.

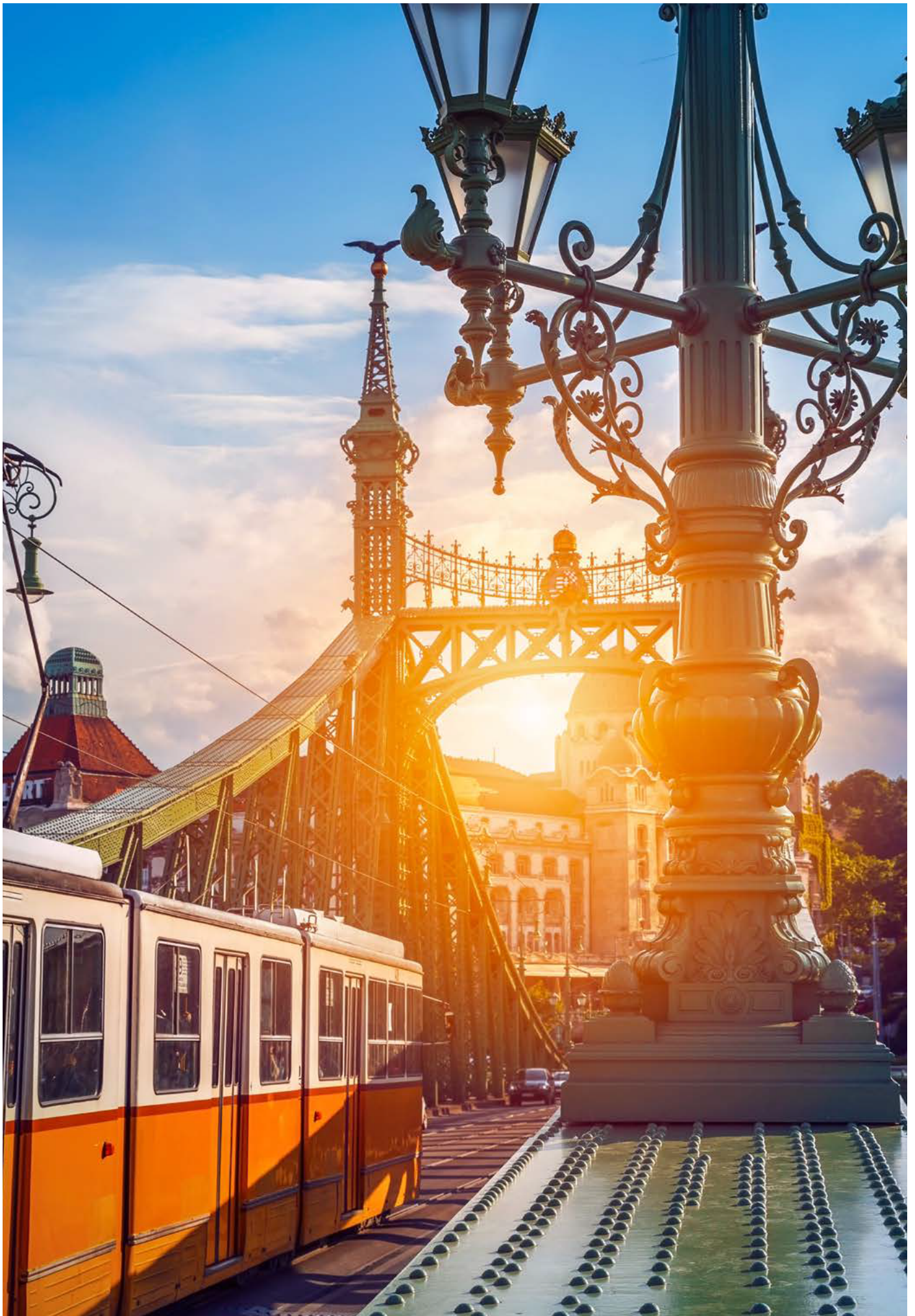
In 2023, during the January-April and October-December heating seasons, we saved a total of HUF 1,243 million worth of natural gas, thanks to a 38% reduction in our natural gas consumption. In 2023, we achieved additional savings of HUF 66 million from performance management activities.

## Energy Efficiency Obligation Scheme (EEOS)

According to the Energy Efficiency Obligation Scheme (EEOS) entered into force on 1 January 2021, commercial and universal licensee suppliers of electricity and natural gas – as well as economic entities selling transport-purpose fuel to end users – are obliged to save and report a legally defined percentage of the quantity of energy sold, either by financing or by purchasing projects implemented with external companies. BKV Zrt. is committed to maximally exploiting the potential inherent in the system for its energy efficiency improving projects – in line with the boundary conditions formulated by the system. Despite ever-changing legislation, the EEOS can be considered a success.

In FY 2023, the sale of CEMs (Certified Energy Savings – 6,688 GJ) audited for the year 2022 was completed. As a result of this activity, the net revenue of BKV Zrt. less expenses was HUF 43 million.

Also, the sale of EEOS certificates from the energy saving measures in 2023 (68,673 GJ) was completed, with net sales less expenses of HUF 442 million.



# LEGAL AND HUMAN RESOURCES DIRECTORATE

Much like in previous years, the gradual implementation of the 41 operational programmes of the five-year Human Resources Strategy 2021-2025 continued in 2023. The Human Resources Strategy was created in 2016, in response to a significant reduction in the number of available and marketable workers, which led to a significant struggle to find labour. This, in turn, resulted in a significant increase in wages and labour shortages at national level.

In 2023, we continued our intensive recruitment campaign to attract new employees, using the following main tools:

- Our advertisements are now available on multiple platforms, including: website (Careers: [hcops://karrier.bkv.hu/allasajanlatok](https://karrier.bkv.hu/allasajanlatok)), Salamon (intranet), Profession, CVonline, Jobline.hu, Mernokallasok.hu, Internal Career Newsletter, External Career Newsletter, Career Facebook ([hcops://www.facebook.com/tegedisvarunkacsapatunkba/](https://www.facebook.com/tegedisvarunkacsapatunkba/)) and our Instagram page ([hcops://www.instagram.com/bkvzrt\\_official/](https://www.instagram.com/bkvzrt_official/)). In addition, our advertisements appear on leaflets, posters, and vehicle stickers, we promote our open positions on vlogs, we also search for prospective employees through paid Facebook, Instagram and Google Ads. (Last year, we had annual contracts with CVonline and Jobline.hu, with unlimited ads posting.)
- We also have a growing amount of content on the BKV TikTok channel, where we show interesting, informative and funny topics in short, 30-second videos, as well as our LinkedIn platform, where we can focus on a narrower target group.
- Our most successful method of recruitment is our headhunting fee, as we are able to reach a large number of potential candidates through the personal acquaintances of thousands of employees. In view of this, in 2023 we further increased internal referral fees, in particular for bus driver and trolleybus driver jobs, for which the gross fee was increased to HUF 500,000, and this was supplemented by a gross HUF 500,000 referral bonus until 31 October 2023, paid to the referred person. Thus, we paid an additional gross HUF 500,000 each to qualified bus and trolleybus driver applicants, and to the BKV employees who recommended them.
- In the spring and autumn of 2023, we participated in the most popular HVG Job Fair, the JOERVERSE Job Fair, as well as the BME Job Fair. In addition, we represented our Company at



the First Budapest Job Fair (in the Biodome area), with the participation of companies from Budapest. In the spring of 2023, we also represented our Company at the Job Fair for helping postal workers find employment after redundancy, and in September we participated in the Car-Free Day with our recruitment bus, as part of the European Mobility Week. At the HVG Job Fair, we were invited by the District XIII Prevention Centre to participate in their Job Fair, where we also represented our Company. We participated in the EDUCATIO International Education Exhibition again in 2023, where we offered internships for vocational students, and dual training for students in higher education.

- We also appear in the HVG Career Plus publication with a full page creative, promoting our Company there and encouraging people to submit their application via our Careers page.

## Legal and Human Resources Directorate Education

### Externally organized training

#### Courses

We organized the following vocational courses (listed courses, IKK (Innovative Training Support Centre) qualifications, official qualifications, other specialised courses, and IT training) for a total of 835 participants:

I. Training courses providing professional qualifications:	692 persons, of which
Technical courses listed in the vocational register	21 persons,
• with the following professions having a skill shortage:	
• electrician	1 person
• building services technician	2 persons
Technical qualifications (based on programme requirements):	23 persons,
• with the following professions having a skill shortage:	
• welder	11 persons
Qualification training under official authority:	116 persons,
• with the following professions having a skill shortage:	
• machine operator	115 persons

Advanced training for professionals (periodic training required by law)	515 persons,
of which:	
• fire safety specialist examination	420 persons,
• other advanced training (e.g. examiner, tachograph, Driver Qualification Card, etc.)	95 persons,
School-based training – adult education/student courses:	17 persons,
of which:	
• secondary school type (technician) training	4 persons,
• higher education vocational training	3 persons,
• specialised advanced training (postgraduate training)	10 persons
2. Other training courses	143 persons, of which
• specialised technical training (e.g. air-conditioning gas installer, track worker, etc.)	68 persons,
• other specialist qualifications (e.g. tax adviser, fire safety lecturer, etc.)	21 persons
• driver training (categories B and C)	8 persons
• IT training	7 persons
• human resources training (e.g. shift leader training, practical instructor, etc.)	39 persons

## Language training

Language training was mainly provided for senior executives (18 persons), as well as for assistant managers and employees working in high-priority work areas (3 persons).

## Training sessions

Advanced training for professional trainers was provided for dispatchers working in the Metro Traffic Engineering Department. In addition, conflict and stress management training, psychological training for drivers, behavioural training for drivers and various team-building training exercises (communication, cooperation, etc.) were organised, with 682 participants.

We organised a Leadership Development training course in the area of the Tram Operations Directorate, which was attended by 144 senior employees. The training curriculum included: corporate culture/work culture; staff turnover – motivation; cooperation, liaising, communication, decision-making.

In 2023, a total of 94 participants from the Railway Operations Directorate attended the “Annual training for human resources administrators”. Training topics: laws, regulations, internal company rules – labour law knowledge

In addition, we focused specifically on training incumbent managers, with 115 senior managers attending 8 management workshops. In 2023, a leadership training workshop was held for 1 group (18 participants).

### **Higher education school system courses**

Various employees (16 persons) enrolled in higher education institutions (technical, transport, economic, etc.) were provided training for various studies at bachelor, master and specialised levels.

### **Dual training**

Since January 2020, the agreement signed with the University of Debrecen was extended to six universities (University of Dunaújváros, University of Óbuda, Széchenyi István University, University of Debrecen, Hungarian University of Agricultural and Life Sciences and Kodolányi János University), with 14 students currently completing internships in 13 fields. In addition, a dual cooperation agreement is also in the process of being signed with the Neumann János University in Kecskemét and the ELTE Savaria University in Szombathely.

The Railway Operations Directorate concluded scholarship agreements with 3 students.

### **Conference**

Various professional events and advanced training courses were also successfully organised and conducted in 2023, including: KTE conferences, transport, technical topics (power supply, maintenance, bus experts, etc.), labour law conferences, chamber of commerce training, accounting training, with a total of 542 participants.

## **Internally organised training courses**

Our Company operates a driving school, where training is conducted based on training programmes approved by the authorities, and ending with an official exam.

In 2023, 885 bus and trolleybus drivers were provided training, as follows:

- |   |             |
|---|-------------|
| • driver category training for new recruits in category D | 276 persons |
| • in the trolleybus driver category                       | 75 persons  |
| • training for obtaining a Driver Qualification Card      | 534 persons |

In addition to training courses, we also started to monitor training processes, and took measures to maintain and improve the quality of training.

- Bus and trolleybus driver qualification exam 793 persons
- Training and examination of internal service vehicle drivers 84 persons

151 drivers participated in corrective driving behaviour training.

### **Organising SAP and IT training courses**

- Courses for key users of the SAP ERP system were attended by 314 persons
- other office-based IT training courses were attended by 199 persons

### **Specialist railway training, advanced training and exams**

In 2023, we coordinated and organised the following activities for the railway sector and the railway authorities, the KTI Railway Methodology Centre and the KAV Railway Examination Centre.

- We organised a training course for specialist railway trainers 159 persons
- organised a training course for specialist railway examiners 14 persons.
- Enrolled in the basic training course for theoretical railway specialist trainers 8 persons

We prepared central training programmes and had them reviewed by the Authority. 7 programmes

We announced 246 railway authority basic courses for railway basic training. 139 of these courses were company exams (line and type knowledge training), and 37 were non-driver training courses relating to railway safety. 1,692 persons were enrolled in these courses.

### **Railway official periodic exam headcounts in 2023**

- Official periodic driving tests 727 persons
- Official periodic non-driving tests 404 persons
- Official extraordinary periodic examinations 49 persons
- Official corporate periodic examinations 898 persons

**Total number of periodic official examinations: 2078 persons**

### **Railway official basic examinations' headcounts in 2023: 737 persons**

- of which: drivers: 572 persons
- non-drivers: 165 persons

### **Railway company organised basic driver exam headcounts in 2023: 729 persons**

of which:

- tram sector: 664 persons
- metro sector: 65 persons

### **Total number of attendees at company and official basic railway examinations:**

**1466 persons**

Our task is to maintain the planned pace of railway training courses and examinations in a constantly changing legislative and enforcement environment, to monitor the quality of training, and to ensure the training and examination of railway employees with appropriate railway safety and up-to-date professional competences.

Last year, the Ministry of Construction and Transport's Deputy State Secretariat for Railway Affairs launched a project to reorganise and restructure the training of train drivers. The Education Department cooperated with the BKV railway departments, as well as with MÁV-HÉV and the rural railway companies (DKV, SZKT, MVK) in local, urban and suburban task forces. Our aim was to ensure that the traffic training of employees was carried out in a way that would not compromise railway safety, providing them with the necessary expertise for their actual work. The task force proposed a system of training aimed at providing performance-oriented and practical skill-building. Our proposals were developed in consensus with the KTI VKMK, KAV, and Railways Department of the Ministry of Construction and Transport, and they were finalised and submitted to the Ministry on 6 December 2023.

## **Vocational training**

BKV Zrt. is currently in contact with 9 Vocational Training Centres and 28 vocational schools. Last year we employed an average of 306 vocational school students per month with student contracts and vocational training employment contracts in more than 20 trades and professions. 162 persons were assigned to the Bus and Trolleybus Operations Directorate's area and bus-related trades' workshops, while 144 persons were assigned to the Railway Operations Directorate's areas and railway-related trades' workshops for mid-year practical courses. 215 of the students were graduates, of whom 12 scholarship students were successfully recruited as employees of our Company. In 2024, an additional 205 vocational school students will join our Company's practical training programme.

Several projects are currently underway:

- a scholarship programme, increasing the number of students, then retaining that number with the help of a ministerial development grant, and
- refurbishment of an Ikarus 263 bus, with the help of the students and workshops.

In addition to the state-of-the-art South Pest workshop renovated in 2018, we also have 3 other operating workshops and various repair workshops, which hosted a total of 552 students and trainees in 2023.

## **Library**

The library currently contains 32,000 fiction and 15,000 reference books for the Company's 850 registered readers, divided between the main library and the specialist library in Kőér utca.

## **Legal and Human Resources Directorate Labour and Social Affairs Department**

The staff of the Labour and Social Affairs Department, in addition to their management-related staffing activities, continued to support the Society's operations in 2023 with professional assistance in labour law.

Our social activities can be summarised as follows:

### **Aid:**

Based on the collective agreement (hereinafter referred to as the "CA"), our Company provided various types of aid on a discretionary basis (e.g. for childbirth, long-term illness, hospitalisation, funeral, etc.) In 2023, it continued to provide various benefits to employees and pensioners of the Company, in amounts totalling HUF 22.8 million, of which pensioner benefits amounted to HUF 5.2 million.

### **The Balatonfenyves Holiday Resort and Galyatető Guest House:**

The Balatonfenyves resort continued to provide recreational facilities in 2023, hosting off-season corporate training courses in the spring and autumn, at a total cost of HUF 32 million. In the summer period, the total amount of holiday support for families amounted to HUF 2.4 million.

The operating costs of the Galyatető Guest House were HUF 8.1 million, with 854 guests spending a total of 2028 nights in the facility.

## **Workers' hostels:**

In 2023, the cost of running the workers' hostels was HUF 144.3 million, with revenues of HUF 42.8 million. The Hungária workers' hostel has been operating from January 2023.

In 2023, a total of 2,529 persons (an average of 210 persons per month) used our workers' hostel accommodations. The demand for single-occupancy continued to increase among workers, rising to 55 from an average of 45 in 2022. Workers' hostels are increasingly in demand among BKV workers: the Kelenföld workers' hostel is full, and the other hostels can only accommodate new applicants in double-occupancy rooms. With support from KÜT, the fees increased by 10% in 2023 (except for Hungária), compared to 2022. Employees working in occupations suffering from labour shortages only need to pay 50% of the fee (except for Hungária), except for single-occupancy rooms, which are available to all employees at a uniform monthly rate, and does not involve discounts.

## **Day Care Centre for the Elderly:**

BKV Zrt. provides care and club-like activities for retired employees, as well as hosting certain social events and activities (training, courses, anniversary celebrations, end-of-year events for trade unions). In 2023, operating costs amounted to 4.9 million.

## **Employer loan:**

In 2023, 3 persons received employer loans. The total amount paid out was HUF 7.5 million. 3 persons took advantage of the preferential early repayment option as specified in the CA, for a total amount of HUF 1.4 million.

## **Company awards**

- 9 employees received Mór Balázs Award,
- 19 employees received a commemorative plaque,
- 2 employees received the "Who We Are Proud Of" award.







# DEVELOPMENT AND COORDINATION DIRECTORATE

## Department of Investment and Technical Development

### Investments, developments

In its 2022 budget, the Municipality of Budapest provided HUF 16 billion for BKV Zrt.'s 2022 development plans within the framework of a Development Agreement. These funds remained available for use until the end of 2023.

At its meeting on 22 February 2023, the Municipal Assembly of Budapest decided in favour of Amendment 1 to the Development Agreement, which provided an additional HUF 560 million for the implementation of the “Infrastructure works necessary for the extension of CAF transport on the section of tram line 56 between Hűvösvölgy and Széll Kálmán tér”.

At its meeting on 26 April 2023, the Municipal Assembly of Budapest decided in favour of Amendment 2 to the Development Agreement, which provided an additional HUF 1,787 million to finance the tram renovations in 2023.

The significant amount and the long utilisation time allowed for the implementation of high-priority tasks with longer lead times.

In 2023, we implemented several projects on tram Lines 50 and 56 to extend the operation of CAF vehicles. As a result, the lines became fully suitable and ready for the new trams to run on them. Corrective and renovation works were necessary due to the larger size of the Spanish-made vehicles and their higher power consumption requirements, due to their air conditioning and grid regeneration capability. These modifications will allow more new vehicles to run on Line 50 than before, and modern low-floor CAF trams will be able to run along the entire length of Line 56.

## **Vehicle procurement, refurbishment and modernisation**

### **Tram vehicle modernisation**

The Tátra T5C5 drive modernisation programme, which started in 2014, continued uninterrupted until the end of 2023. As a result, the fleet – now with an average age of over 40 years – has become more energy-efficient and modern-looking. With the addition of 14 more vehicles upgraded in 2023, the fleet became homogeneous, with the exception of 14 vehicles kept for traffic and heritage purposes. This greatly facilitates vehicle disposal and maintenance, contributes to energy-efficient operation, and also results in financial savings.

The number of modern low-floor trams arriving in the next few years will only allow for scrapping a limited number of TW6000/6100 trams, meaning that it will be necessary to overhaul the remaining stock, depending on its mileage. 2023 saw the renovation of 6 trams, and the programme will continue in 2024 with the same technical content.

### **Other vehicle procurement, modernisation, refurbishment, and safety modifications**

The renovation of the tram with fleet number 1531 began in 2021. The tram was restored to its original condition using unique technological solutions and authentic period-appropriate components. The renovation was completed in the fourth quarter of 2023.

## **Complex tram infrastructure renovations**

### **Hűvösvölgy tram line made ready for operating CAF vehicles**

In order to make tram line 56 suitable for operating CAF trams, we had to carry out electrical infrastructure renovations on several points of the section between Széll Kálmán tér and Hűvösvölgy. We carried out local renovations between Budagyöngye and Széll Kálmán tér, rebuilt the tram tracks between Budagyöngye and Kelemen László utca, as well as between Heinrich István utca and the Hűvösvölgy arches. We also replaced the double track connection at the terminus. We ensured the accessibility of the stops at Kelemen László utca, Zuhatag sor and Heinrich István utca, and renovated the existing passenger shelters. We reinforced the overhead and underground power cable network along the route, replaced overhead line support poles, and refurbished the Hűvösvölgy and some of the Szépilek transformers. We set up a radio relay station at János Hospital and Budagyöngye.

The project allows the regular operation of low-floor CAF trams on tram line 56, increasing railway transport safety, availability and service life.

## Track renovations

### Renovation of tram line 50

The tracks on these sections were extremely worn, requiring the replacement of the track couplings and the superstructure (ballast, cross-sleepers). The 2022 works involved rebuilding the tram tracks and installing of the switch control and heating equipment. The replacement of the signalling equipment was completed in 2023, and the project was fully completed in the second quarter.

## Power supply tasks

### Partial power supply upgrade on tram line 50

The commissioning of the new CAF vehicles involves higher traction and auxiliary energy demands compared to the vehicles previously in service. This could be met no longer reliably by the line transformer equipment, which therefore needed to be replaced.

In 2022, the replacement of traction and auxiliary transformers, rectifiers, cell lines, distributors and remote-control equipment began in the Száva, Kispest and Szentlőrinc transformer substations. These works were completed in the third quarter of 2023.

### Partial overhaul of underground traction cable and overhead line network on tram line 50

In order to operate CAF trams with higher power requirements, the power supply network also needed to be upgraded, and the cooperation cable and overhead supply cable network needed to be modified and extended.

2022 saw the replacement and installation of 4 x 1 x 240 mm<sup>2</sup> copper cross-section power cables for each feeder section of the line, the construction of a longitudinal negative return network, the adaptation of the transformers to the external network (internal rewiring and cabinet designs were required due to changes in the cooperation), and the replacement of the weak static condition of the poles and supports, which was completed in the third quarter of 2023.

### Replacement of the traction transformer at the Dráva transformer substation

For operational safety, the damaged traction transformer in Dráva substation needed to be replaced, as further transformer failures would make trolleybus traffic impossible in the supply area. In 2023, as a result of a public procurement procedure, we contracted for the procurement of transformers in 2024. The replacement will be carried out by BKV personnel.



## **Telecommunications and security equipment renovations**

### **Autostop renovation on metro line M3**

The 202 autostop devices (trip stops) on the M3 metro line have been in operation continuously since the metro line was put into service. Their purpose is to prevent trains from passing red signals without permission. The autostop devices always activate when the colour image of the associated signal changes (red – not red), and their renovation is a traffic safety issue. In 2023, we renovated 25 autostop devices.

### **SEL 700 point machine overhaul on metro line M3**

The 98 point machines on the M3 metro line have been in continuous operation since their installation. The safe operation of the power units can only be maintained with regular, cyclical overhauls, as their reliable operation is a fundamental prerequisite for smooth and safe metro traffic. In 2023, the overhaul of 20 point machines was completed, followed by test runs and handover.

## **Other infrastructure-related investments**

### **Project planning and preparation**

#### **Relocation of Üllői út warehouse and offices to the traffic building of Ferencváros depot**

The traffic building of Ferencváros depot was vacant for years, and is in a severely deteriorated state. Its structural condition is of concern, and it needs renovation. In order to improve the technical state of the building and to make use of its offices and service areas, the building needs to be renovated, for which architectural plans have been drawn up.

#### **Structural analysis and detailed design of halls B and D in the cogwheel depot**

The wall cracks that had previously formed in halls B and D of the cogwheel depot have widened further, and the plaster blocks have cracked. The structural analyses and plans necessary for the professional repair of the cracks and the detection and repair of possible structural defects was completed. This allows for the reinforcement of the load-bearing structures and the elimination of cracks.

### **Structural analysis for the renovation of Nagy Lajos király útja/Thököly út station building**

In preparation for the renovation of the building, which was in an ageing and dilapidated state, we conducted a comprehensive structural analysis to determine the technical content of the renovation affecting the load-bearing structure. We also had detailed plans prepared for the complete structural renovation of the station building and the reinforcement of the load-bearing structures.

### **Design of a new storm water reservoir and a new oil separator at Kelenföld Bus Garage**

The existing storm water reservoir and oil separator with a combined volume of 150 m<sup>3</sup> are no longer performing their functions adequately, and are obstructing vehicle traffic on the site during maintenance. We were able to designate a new installation location for the new storm water reservoir that does not hinder traffic, and the existing system will continue to serve until the new one is commissioned. The capacity of the public sewer and the 56,181 m<sup>2</sup> storm water catchment area base would require a 960 m<sup>3</sup> storm water storage reservoir, according to current regulations. However, we managed to have a 439 m<sup>3</sup> size accepted for the new storm water reservoir, considering the volume of the site's rainwater sewer network and the short-term surface storage of rainwater in the site's low-lying areas without endangering buildings with flooding. We had the design documentation prepared for the construction of the new storm water reservoir and oil separator, and obtained the establishment permit for water rights.

## **Renovation of buildings and structures**

### **Renovation of offices and social rooms at the Kelenföld depot**

A covered smoking area was created next to the dispatcher building, taking local conditions into account. We replaced I I windows in the signalling plant offices, as they did not meet current thermal engineering regulations and requirements. With new, well-insulated windows that close tightly, draughts and heat loss in the rooms have been eliminated, so the renovation was justified from an energy-saving point of view, as well. A 20-person dining room was set up in Hall I, providing adequate dining conditions for those working there.

### **Replacement of doors and windows in Villányi út substation offices, townscape planning procedure and related works**

The windows in the Villányi substation offices were ageing, warped, difficult to close and in need of replacement. Following townscape approval, we replaced the windows with modern ones meeting current regulations, thus improving the energy efficiency and heat retention of the rooms and the working conditions of those working there.

### **Complete renovation of the roof insulation of the locomotive storage and diesel engine repair halls of the PFT building at the M3 site**

The existing roof insulation and steel rainwater drainage pipes of the halls were ageing and heavily corroded, with holes in several places, and could not be repaired. During rainfall, rainwater seeping through the ceiling and the pipework flowed onto the installed electrical equipment and accumulated on walking surfaces, causing serious accident and slip hazards from an occupational safety point of view. The project included the insulation of the flat building roofs against heat and rainwater, the design of the slope and the surface finish, along with additional tin roofing works, and the installation of a lightning protection system. As a result, leaks were eliminated, the preservation of the roof structure was achieved, energy characteristics improved, and better working conditions could be ensured.

### **Doors and windows replacements in Hungária Tram Depot paint warehouse, V200 standby warehouse, vehicle wash room**

The doors and windows of the buildings were outdated and did not meet current energy requirements, justifying their replacement. The energy performance of the buildings was improved through the installation of modern doors and windows.

### **Renovation of Kispest workshop (Üllői út 266.) upstairs lounge, windows replacement**

The technical condition of the social rooms in Kispest substation workshop was deteriorating, the windows did not comply with energy standards. By installing modern, low heat loss windows, energy performance improved, and the aesthetic renovation of the rooms created more pleasant and hygienic working conditions.

### **Environmental investments in the utilisation of renewable energy**

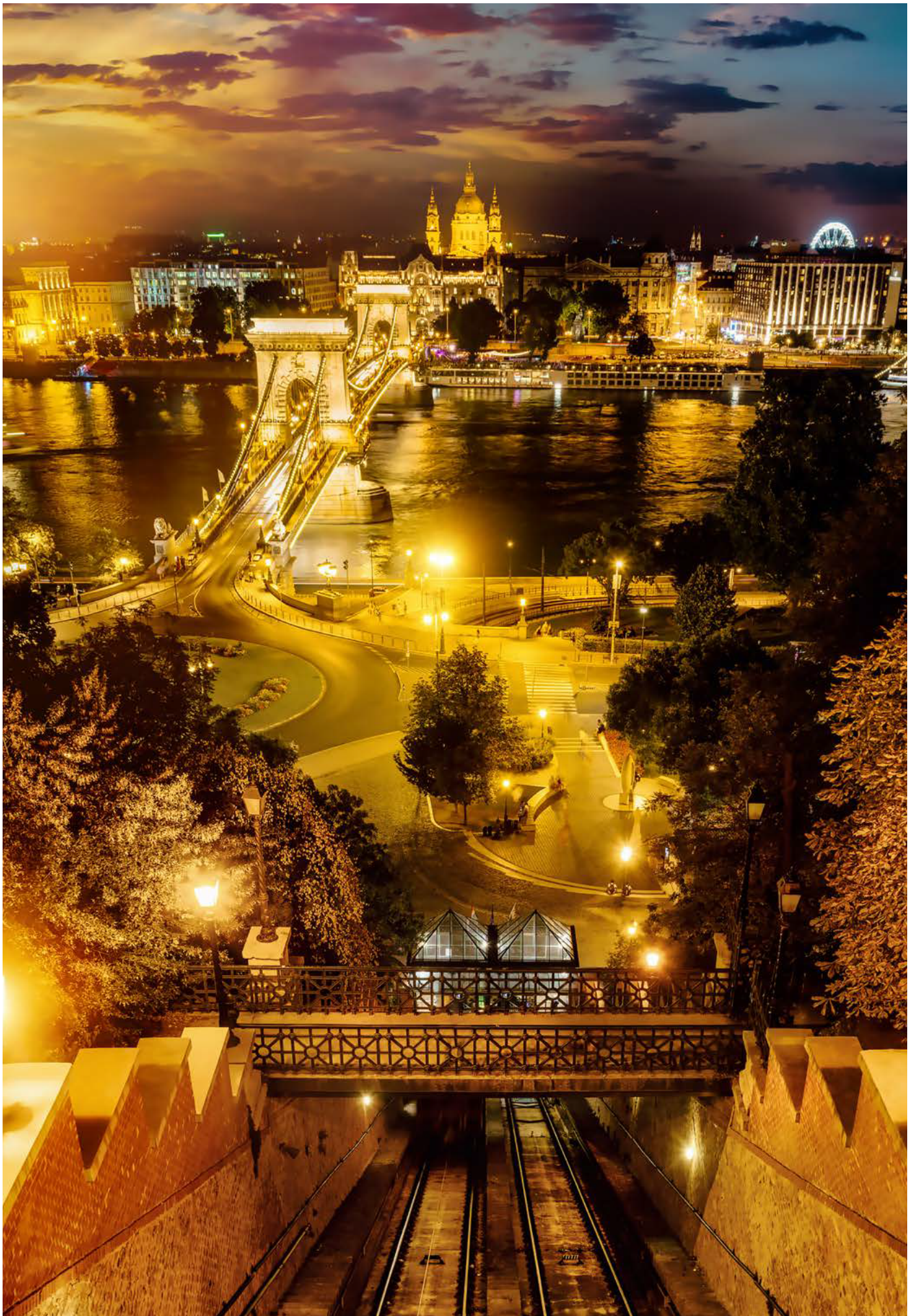
The installation of solar panel systems and the environmentally friendly production of part of the required electricity is an economical investment that quickly pays a return on investment. Therefore, our Company tries to cover part of its energy needs at each site from clean, renewable, safe, noiseless and cost-effective energy sources with no emissions. In 2023, we installed a 100-kW solar PV system on the roof of the plant hall building at Cinkota bus garage, and a 40-kW solar PV system on the office building of Hungária Tram Depot. The electricity generated by the installed systems is used directly within the sites, partly meeting the electricity needs of the sites, and is not fed back into the public electricity grid.

### **Millennium Underground and Cogwheel Railway to create new vehicle reception conditions**

In 2018, BKV Zrt. signed a grant contract with the Ministry of Innovation and Technology to replace the ageing vehicles of the Millennium Underground and the Cogwheel Railway. The grant was used partly to draw up the documents needed to launch the procurement process for the design and production of the vehicles, if the necessary funding is available, and partly to create the necessary conditions for the reception of the new vehicles.

We obtained the preliminary type approvals in principle for both vehicle types in 2022, and in 2023, the procurement of the related equipment was completed with the installation of the underfloor railway car wheel lathes in Millennium Underground- and Baross Depots. Following a successful trial run, the Rail Authority approved the opening for use of both car wheel lathes in June 2023. The state-of-the-art equipment is suitable for the professional maintenance of the wheels of both newly arriving and existing vehicles.







# TOURISM AND SALES

BKV Zrt. operates its special vehicles, the Budapest Castle Hill Funicular and the Zugliget Chairlift, mainly for tourism purposes. In addition to this public service, we also operate special services with tourist buses, as well as with traffic and heritage vehicles. We had an exceptionally successful year in 2023: the summer months delivered the expected results and the post-pandemic recovery was noticeable.

## **Budapest Castle Hill Funicular**

The Budapest Castle Hill Funicular has been a World Heritage Site since 1987, remaining a popular attraction today. It has been BKV Zrt.'s most successful non-public service operation for decades.

Passengers are transported in 2 coaches (Margit and Gellért) with 24 seats each. Foreign tourists continue to account for the bulk of its traffic, but the proportion of domestic passengers has also increased.

Due to the increase in our costs, and in order to generate higher revenues, only return tickets are available for both ticket types. From 1 April, we implemented a partial price increase, which only affected full fare tickets, while the price of the discounted ticket remains unchanged.

The electronic ticketing system was launched on 21 August. The webshop is becoming increasingly popular among visitors and has lived up to the expectations, accounting for around 8% of all ticket sales between its launch and the end of the year.

In 2023, the Funicular achieved a net revenue of almost HUF 1.66 billion, 74% higher than our peak year in 2019.

## **Zugliget Chairlift**

Also among the non-public service activities of BKV Zrt. is the Zugliget Chairlift, which is also very popular with the domestic travelling public.

The same applies for the Budapest Castle Hill Funicular: only return tickets are available for purchase. From 1 April, there has also been a partial price increase for full-fare tickets on the Chairlift. In view of our experiences with the Funicular, we also prepared an e-ticketing system for the Chairlift, but it is not expected to be introduced until 2025.

The summer months once again proved to be the strongest period. As in previous years, the Night of the Chairlifts was organised in 2023 as well, for the 8th time nationwide. From 18 September, due to non-scheduled repair works, we decided to bring forward several parts of the renovation planned for the next year, meaning that we did not open for the rest of the year.

In 2023, the Chairlift achieved net revenue of HUF 258 million, exceeding our peak full-year revenue in 2019 by 5%, despite the prolonged operational shutdown.

## **Specific service activity**

The Tourism and Marketing Division is responsible for the management and coordination of the Company's special service activities, involving all relevant areas. The division had three dedicated buses (of which one was sold in Q4), but also accepts orders for public road vehicles, which it executes without any complaints in cooperation with the sectors.

The Tourism and Sales Division also handles the administration of contracted special bus services. Due to the volatility of fuel prices, we started to introduce two-component pricing, which shares the price risk between the contractor and the customer.

The special service went through another challenging period in 2023, but our Company was able to fully meet its social obligations as well as its corporate and external orders.

## **Heritage activities**

The Tourism and Sales Division operates an IK 630 (convertible) heritage vehicle, and actively coordinates heritage transport activities. Every year, the heritage transport service operates according to an annual plan agreed with BKK, typically between April and November. In 2023, the aftermath of the pandemic continued to be evident in the orders for heritage vehicles, and the surge in material, parts and energy prices did not spare heritage transport either. Nevertheless, BKK's needs could be met at the former standard.

Another priority is the preservation and selection of new vehicles, and their preparation for future heritage tasks. As a result, the tram with fleet number 1351 and one of the first Russian metro trains have been refurbished, and will be officially presented next year.

## Commercial activities

Our Company also engages in additional revenue-generating activities arising from utilisation and other product sales opportunities.

The internal utilisation of redundant movables and their sale on the market is a regular and high-volume task. The sale of waste materials generated by track reconstruction and vehicle replacement, redundant equipment and stocks, and machinery and vehicles no longer in use once again generated significant returns this year.

In addition to renting out some of our equipment and vehicles, there was also a strong demand for the use of our company-owned areas and surfaces. We profited from various photo shoots, including for events and major film shoots.

We also sell travel tickets on our public transport vehicles and in some M1 platform booths, the resulting turnover of which clearly illustrates the gradual recovery of domestic tourism after the pandemic.

In our commercial diesel fuel sales at our Cinkota and South Pest sites, the loss of market diversity, the partial application of the regulatory price cap and subsequent pricing developments, as well as the slow decline of diesel vehicles have all posed significant challenges in recent years, but we have nevertheless managed to stay afloat.

We pay special attention to the satisfaction of our travelling public and to the positive public image of BKV Zrt., which is perfectly served by our sales of souvenirs and relics, primarily related to public transport.

In addition to online sales through our webshop, our auction portal and physical sales through our BKV museums, events and retailers, we opened a “souvenir shop” in 2023, which proved to be a good decision from both a branding and a revenue perspective.

BKV's revenues from the above-mentioned utilisation, leasing, trading and sales activities exceeded HUF 536 million in 2023.

# STRATEGIC AND PROCUREMENT DIRECTORATE

As a large, metropolitan-owned company with 10,000 employees, we are responsible for and committed to providing sustainable, environmentally conscious, energy-efficient and high-quality services, the basis of which is the continuous improvement of our performance. To this end, our Company implemented and operates an integrated management system in accordance with the standards MSZ EN ISO 9001:2015, MSZ EN ISO 14001:2015 and MSZ EN ISO 50001:2019, as well as Regulation (EC) No 1221/2009 of the European Parliament and of the Council (EMAS Regulation). The certifying organisation completed a surveillance audit in June 2023, covering the following sites: M4 Metro Depot, Kelenföld Tram Depot, Trolleybus Division. Last year, the scope of EMAS was extended to three sites: the Budafok Tram Depot, the M4 Metro Depot and the Széplóna Tram Depot successfully passed their renewal audits in November 2023.

In 2023, in line with its strategic objectives, our company published its first Sustainability Report, summarising its achievements to date, as well as its future goals. In order to meet the requirements of the Act on the rules of corporate social responsibility, taking into account environmental, social and societal aspects, and amending other related acts, in order to promote sustainable financing and unified corporate responsibility (also known as: “ESG Act”), our Company started preparations in order to comply therewith. We also prepared our vehicle procurement plan under Government Decree No 397/2022 (X. 20.) on the promotion of the procurement of clean road transport vehicles to support low-emission mobility services.

We are doing this because BKV Zrt. aims to be a safe, reliable, sustainable and competitive public transport service provider that is viewed as a partner by market players.

Our company participated in the review of the Budapest Mobility Plan, which was accompanied by an update of our corporate strategy.

In addition, our Company participated in the professional evaluation of the ideas received for the 2022/23 cycle of the “Community Budget”, a project announced by the Municipality of Budapest.

We played a key role in the Hungarian Transport Association’s project “Investigating the possibilities of sustainable green transport”, the results of which were presented at several conferences, including a professional event of the Hungarian Economic Society.

As in previous years, our Company once again announced its Idea Management Competition, where our colleagues proactively participated with their ideas and suggestions for improvement in the realisation of the Company's objectives – efficient, sustainable, high-quality public transport services.

In 2023, 356 public procurement procedures were successfully completed, resulting in 384 contracts worth a total of nearly HUF 43,423 million.

- Out of 219 individual DBR contracts for the implementation of specific public procurement needs, 253 individual DBR contracts with commitments were concluded for a total amount of HUF 22,357 million.
- In other public procurement procedures, we concluded 131 contracts worth HUF 21,066 million.





# ECONOMIC DIRECTORATE

## Management of BKV Zrt. in 2023

In 2023, BKV Zrt. realised HUF 195,454 million in operating revenues (net sales revenues, other revenues) and HUF 852 million in capitalised value of own performance, which exceeds the 2022 figures by HUF 14,346 million.

BKV Zrt. operates under a Public Service Contract concluded with BKK Zrt. According to the contract, BKV Zrt. provides public transport services as an internal service provider of BKK Zrt., for which it is entitled to a public service fee up to the amount of its justified costs not covered by revenues. The contract in force between BKK Zrt. and BKV Zrt. contains the methodology forming the basis for calculating the monthly public service fee to be paid, the ordered traffic performance, the conditions of performance, planning and reporting requirements, the Bonus/Malus system, as well as penalty items.

Based on the above, BKV Zrt. received HUF 167,097 million in public service fees, which is 7.6% higher than in the previous year, but below the level of justified costs less revenues.

Revenues from contractual and other services includes revenues generated by non-public service activities, typically tourism. Revenues from contractual and other services increased significantly: by HUF 722 million compared to the previous year, of which Funicular revenue increased by HUF 795 million, Chairlift revenue increased by HUF 46 million and special service revenue decreased by HUF 154 million, the latter due to the high base value related to refugee transport. The actual revenues exceeded budgeted revenues by HUF 900 million: the Funicular achieved revenues almost twice as high as the budget, by HUF 812 million. In the last quarter of 2023, renovation works were carried out on the Chairlift, but despite this, the revenues of the Chairlift exceeded budgeted revenue figures by HUF 52 million.

Revenues from other activities exceed the base value by HUF 665 million and the budgeted value by HUF 1,016 million. On the revenue from other activities line, our Company reports, among others, the rental and lease of tangible fixed assets, income from corporate housing, holiday homes, rental of advertising space and income from intermediary services. In 2023, real estate utilisation activities generated HUF 1,168 million in revenues, 21% above the budgeted target of HUF 962 million. Temporary licences for use amounted to HUF 3.4 million per year. The rental of advertising space in 2023 generated HUF 784 million, exceeding the budgeted revenue value of HUF 638 million by almost 23%. Fees from rental apartments in 2023 again resulted in HUF 11 million, close to the base of HUF 11.4 million. In addition, we

also sold a condominium property, which generated an additional HUF 33.2 million in revenues. Together, these generated HUF 2,000 million more than the planned HUF 1,611 million, exceeding it by about 24%.

The excess revenue from rental fees is due to the fact that we were able to incorporate inflationary effects into prices to a greater extent than expected. Revenues from agency activities classified as non-public service activities exceeded both the base and the budgeted values. Revenues from intermediated services are above the baseline but falls short of the budget value, due to a shortfall in revenues from IT re invoiced services and, in parallel, the under-recovery of expenses.

Other revenues increased by 7.8%, or HUF 1,529 million, compared to the base value, due to higher deferred income. However, there is still a shortfall of HUF 17,569 million compared to the budget. The reason for this is the absence of the energy support originally planned in the amount of HUF 14,000 million, lower than budgeted amounts of deferred income, and the fact that the provisions release also fell short of the budget. There is, however, a surplus in the proceeds from the sale of tangible fixed assets and in the amount of interest and compensation received compared to the plan.

The capitalised value of own performance in 2023 is HUF 337 million below the base, but it exceeds the budget by HUF 369 million. The reason for the surplus compared to the budget is that the total operating costs of the Metro Renovation Project Office, which is not part of the public service sectors, appear in the amount of HUF 667 million in 2023, while according to the plan, it would have operated as part of the public service sectors from the second half of 2023. A major highlight of the period under review was the renovation of the metro AVR system in connection with the M3 reconstruction.

Material costs excluding energy in 2023 are 11.3% (+HUF 1,840 million) higher than in the previous year. The international and macroeconomic situation in recent years led to a sharp rise in material and component prices, in addition to energy prices. Compared to the 2022 values, the increase for the largest item – vehicle parts – is HUF 767 million, with the highest utilisation occurring in the metro and tram sectors. The increase is partly linked to overhauls on CAF trams, but also to an increase in priority maintenance on metro vehicles. Compared to the base, the highest increase was recorded for vehicle main parts (+HUF 857 million), while the cost of track construction and maintenance priority materials (+HUF 238 million) and communications materials (+HUF 134 million) also increased. The 8.1% (HUF -1,584 million) savings compared to the budget were mainly due to reduced management costs to manage the significant risks seen during the year, and the restrained management typical of the operating directorates, despite the fact that the Company was not permitted to take inflationary effects into account in the 2023 Business Plan.

Overall, energy costs decreased by 3.7% compared to the base year and by 14.7% compared to the budget, mainly due to favourable trends in electricity prices. The decrease compared to the base was caused by a significant (12.6%) decrease in the average annual price of gas oil. The price of traction

electricity also fell slightly, but the renovation of the M3 metro line and the restart of traffic meant that consumption was higher than the baseline. On the 'other energy' line, the significant increase in the price of natural gas caused a surplus compared to the baseline, which the Company tried to mitigate by the introduced energy efficiency measures.

The actual data for the services used in the current year are 12.3% (HUF 3,874 million) higher than the base year, but they are 5.1% (HUF 1,912 million) below the planned value. The non-public services sectors achieved modest savings. Due to price changes, asset protection and cleaning costs exceeded the base, while vehicle rental costs increased by nearly HUF 2 billion due to the introduction of new leased vehicles. In addition to price changes, the increase of over HUF 1.5 billion in IT costs was due to maintaining licenses and hardware devices, as well as the implementation of other development tasks. The cost of the district heating service booked on the services used line decreased by 116 million HUF compared to baseline, due to the favourable development of the service fee. The savings compared to the budget, which also resulted in the substantial cost overruns detailed above, were primarily due to the reduced management budgets to address the significant risks seen during the year, as well as restrained management by the operational directorates.

The value of other services exceeds the baseline by HUF 318 million, mainly due to an increase in vehicle insurance premiums, and is HUF 118 million below the budgeted value.

The cost of goods sold is HUF 14 million higher than the baseline, with a saving of HUF 57 million compared to the plan, due to lower than planned development of the price of transmitted electricity.

The value of services sold (intermediated) is slightly higher than baseline, but is HUF 142 million below budget. The latter is due to the fact that the expenditures (and revenues) for IT re invoiced services were not incurred as planned.

Overall, personnel expenses exceeded the baseline by HUF 9,257 million (10.8%), but fell short of the 2023 budget by HUF 915 million (1%). The average rate of base salary increase was 15% from 1 January 2023.

The value of depreciation is 12.1% lower than planned, due to the unplanned developments of the capitalisation of the M3 metro renovation, and the restructuring of bus depreciations.

The value of other expenses in 2023 exceeds the baseline by HUF 777 million, and the budgeted amount by HUF 379 million. The increase compared to the baseline and to the budget is due to the expenditure on additional financing instruments used to maintain solvency (deferral of NAV tax and contribution payments, instalment payments to MVM).

The Company's operating result in 2023 was a loss of HUF 27,529 million.

The result of financial transactions in 2023 is a loss of HUF 932 million, which is HUF 1,531 million more favourable than planned. The deviation from the planned value is due to the lower occurrence of planned interest on loans, thanks to the decrease in interest on loans and the public service fee advances drawn down during the year.

Profit before tax is a loss of HUF 28,461 million. The 2023 Business Plan included a total pre-tax loss of HUF 34,787 million, i.e. BKV Zrt. ended the year 2023 with a result that was HUF 6,326 million more favourable than expected.

## **IT Department**

The primary purpose and function of the IT Department is to provide value-added IT and telecommunications services to the Company, to provide professional support for the Company's business processes, to establish and regularly maintain a regulatory environment for service delivery and information security, and to ensure the availability and quality of the IT and telecommunications applications used by the Company. In the course of providing services, priority is given to receiving, handling, resolving and responding to IT-related problems, notifications and suggestions from the various departments.

The Information Technology Service Management System (ISO 20000) and the Information Security Management System (ISO 27001), implemented and certified in 2014 and 2017 respectively, guarantee compliance of the service environment for the Company. Day-to-day work on governance systems contributes significantly to the successful completion of renewal and surveillance audits year after year – as was the case in 2023.

One of the most important tasks of 2023 was aimed at the future of outsourcing. In view of the expiration of the first five-year period of the framework service contract (the "Framework Contract") on 30 June 2024, our Company needed to decide whether to extend the Framework Contract or to launch a new procurement procedure for the outsourced service. The pre-decision assessments examined the adequacy and cost-effectiveness of the Framework Contract from a legal and service provision perspective, as well as the Company's vision for the future of the IT service. Following the review, our submission was first discussed by the Board of Directors of our Company in consultations with the Board of Directors of BKK, then a decision was taken to extend the Framework Contract and to commit beyond the year.

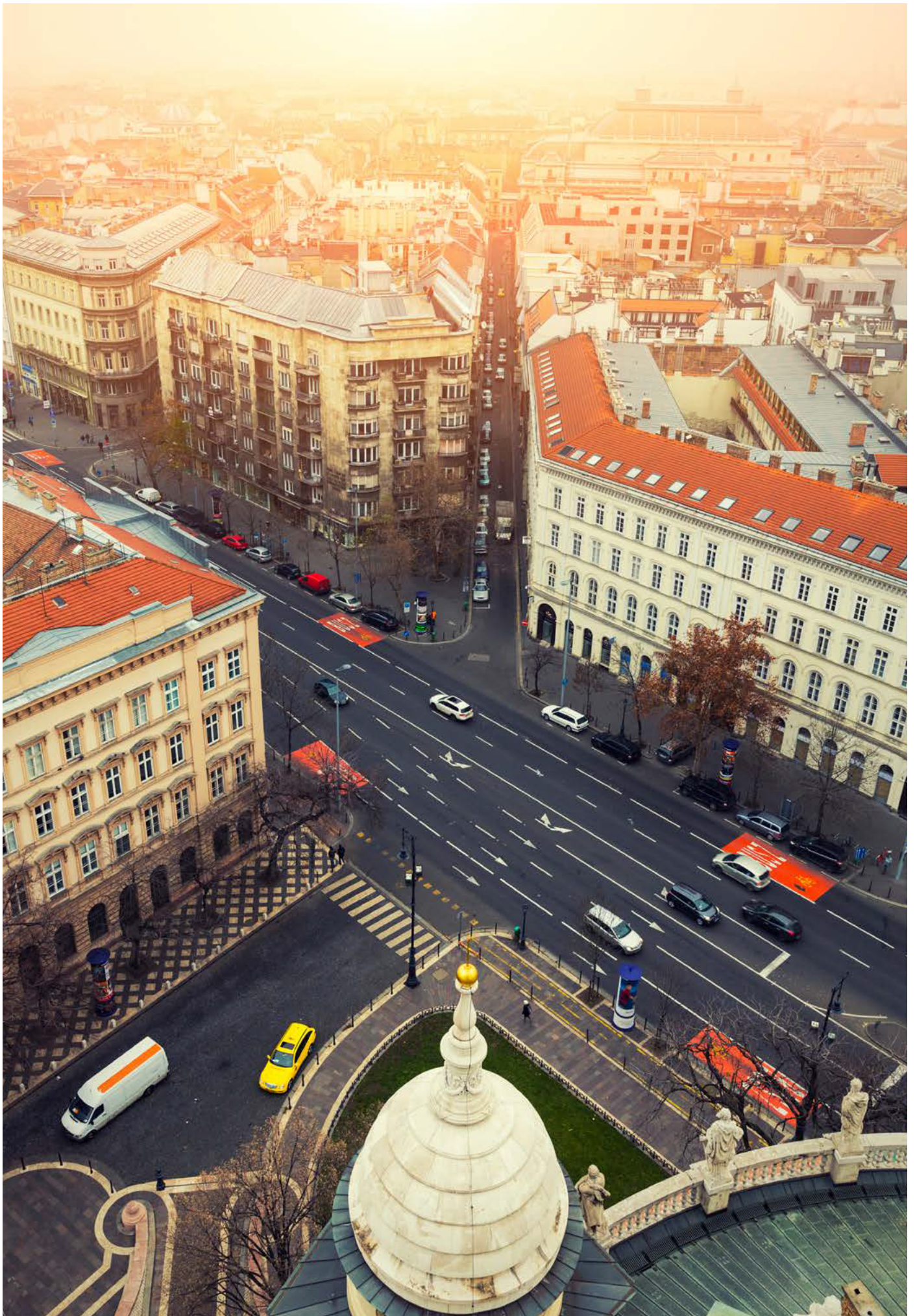
The projects of the IT Department in 2023 were typically related to the maintenance and improvement of stable and expected quality of service provision. These were mainly works to implement the maintenance, development, version tracking of basic infrastructure belonging to the most important

enterprise resource planning systems (SAP, ForTe) and other smaller applications, as well as to create the foundations for strategically important innovations. By implementing projects that are less visible to the Company's users, but still of high priority, we reduced the risks of exposures to critical systems – thus maintaining the quality of the service provided – and contributed to the realisation of the IT vision, laying the foundations for the necessary strategic developments.

In addition to infrastructure-related activities, the IT Department also focused on providing IT support to users, and on meeting the Company's emerging business needs. Accordingly, the other main projects of the department were as follows:

- digitalisation of energy meter readings and development of a data warehouse for processing,
- Development of the RFID Asset Register Application (RENA) version 2.1,
- mapping of traffic flows,
- replacing workstations with expiring warranties and providing support for remote work,
- The Accident and Insurance Reporting System goes live,
- Developing WiFi infrastructure.







# SECURITY DIRECTORATE

In order to implement an effective security concept, the Chief Security Officers of the Security Directorate carried out risk analyses and company background checks in 391 cases as part of their economic protection and corporate security activities, identifying risk factors in 13 cases.

The Security Control Department effectively supervised the contractual partners performing live guarding and security technology services for the Company.

The Occupational Safety Department and the Fire and Civil Protection Department successfully carried out their duties. The total number of workplace accidents, as well as the number of fire incidents, decreased in comparison to 2022. The inspections carried out by the Authority did not result in any occupational safety or fire protection fines.

## **Corporate security activities**

The Corporate Security Group's activities largely consisted of tasks related to the procurement activities of the Strategic and Procurement Directorate and the Bus and Trolleybus Operations Directorate, which included and were facilitated by the performance of company background investigations and risk factors identification, and the performance of corporate security due diligence on potential business partners.

In all cases, applicants were informed of the results of the corporate security and company background checks on an ongoing basis.

391 audits were completed in 2023, of which 66 were related to simplified procurement and 304 used public procurement or tendering procedures. Low-level risk was identified in 10 cases, medium risk in 2 cases, and high risk in 1 case.

In 2023, a smaller proportion of company security audits were related to real estate utilisation tasks. As part of BKV Zrt.'s real estate utilisation activities, 21 cases were investigated by the Development and Coordination Directorate in the framework of the corporate security audit of the companies applying for the lease of certain real estate and of the initiatives for the extension of existing contracts, of which one resulted in the identification of low-level risk.

In 2023, they continued to prepare measures to streamline and increase the efficiency of corporate security activities, and to develop proposals to clarify company regulations. In the first half of 2023, a draft Security Director's instruction on the regulation of corporate security tasks related to procurement and property utilisation was developed and it entered into force on 25 August 2023, following corporate coordination.

In parallel, a thorough review of the methodology of controls, and of the ways to make better use of the record-keeping system and the data generated was carried out.

## Asset Protection Control Activity

In 2023, live security guard services for the Company were provided by O.M.T. Controll Hungária Zrt., while technical asset protection was provided by the Sonic Kft. – CIVIL Rendszertechnika és Távfelügyelet Kft. Consortium.

Security guard service tasks were performed by 179 persons on workdays and 169 persons on weekends and holidays.

During the year, the staff of the Department actively participated in the professional supervision of O.M.T. Hungária 2001 Zrt. and carried out similar work for the consortium formed by Sonic Kft. and CIVIL Rendszertechnika és Távfelügyeleti Kft., which provide security services to the Company.

115 audits were performed in connection with asset protection activities, the findings of which were recorded in a report. Comments and suggestions were made in the light of the experiences and findings, and immediate action was initiated where necessary.

In 2023, there were no omissions, delays or faulty performance by the personal and property security guards that would have necessitated imposing a penalty or asserting a claim for damages against the Service Provider.

In previous years, material damage from the theft of overhead lines on tram and trolleybus lines was significant – in excess of HUF 100 million. Thanks to the continuous preventive and detection activities of the Asset Protection Control Department, the Directorate achieved outstanding results, completely curbing cable theft in recent years.

The staff of the Asset Protection Control Department monitored fuel consumption/usage data in the SAP system on a random basis, or on request. In 2023, 230 queries and analyses were carried out. Damage to means of transport, especially “graffiti”, was constantly monitored. In 2023, there were 28 incidents of vandalism, graffiti or other “painting” activities that can be classified as such.

Recurring checks on the proper use of vehicles for interior use and of the Schörling type were carried out on 12 occasions in 2023, in accordance with the annual Work and Inspection Schedule. The experience gained from the checks shows that the logbooks were kept and used appropriately and in compliance with the rules and regulations in force.

In 2023, 253 customer complaints and notifications were received. Complaint letters and notifications received directly by the Property Protection Control Department or forwarded by the Customer Service Department were investigated by the Department’s staff, who informed the complainants, and suggested taking further measures where it was necessary.

The department responded to 11 requests from the authorities.

## **Occupational safety and health activities:**

447 workplace accidents occurred in 2023. The number of workplace accidents resulting in incapacity to work for more than 3 working days showed a slight increase, to 216 incidents. In 2022, there were 203 events. In 2023, the number of workplace accidents resulting in 1-3 days of incapacity to work was 3, similar to 2022. The number of accidents at work not resulting in incapacity for work was 228 in 2023, compared to 253 cases in 2022.

Regarding road accidents, there were 116 cases in 2023 and 82 in 2022. There was 1 fatal accident. On 22 October 2023, an employee of the Tram Vehicle Technical Chief Engineering Department, Traction Specialist Service, Baross Vehicle Maintenance Plant fell into the manhole located under the track while opening the gate for the purpose of vehicle movement at the Baross depot site when checking the opening up of the electric gate. The injured worker died days later, due to his injuries sustained in connection with the accident.

During the evaluated period, no occupational safety fine was imposed by the Occupational Safety Inspection Department of the Budapest Government Office's Occupational Safety and Labour Affairs Division.

## **Fire and Civil Protection activities**

The Fire and Civil Protection Department conducted fire safety inspections at 28 sites, 32 stations on 3 metro lines, 102 terminals and 39 transformers.

They remained in constant contact with the National Directorate General of Disaster Management and the Metropolitan Directorate of Disaster Management, both for firefighting and for fire prevention activities. 40 local awareness, training and control exercises were carried out jointly with the fire-fighting and technical rescue units of the Metropolitan Directorate of Disaster Management.

Last year, 8 fires occurred at our Company, of which 6 involved fires in vehicles (all 6 cases in buses), and 2 were equipment fires.

Compared to the previous year, there was a decrease in both the number of fires and the amount of fire damage sustained. None of the fires caused any personal injuries.



# CORPORATE RELATIONS OFFICE

In the first half of the year, much like in recent years, the reconstruction of the M3 metro line was at the forefront of BKV's communication efforts. From January onwards, a succession of events was organised to mark the inauguration of the renovated inner-city stations.

- On 23 January, the metro stations at Deák Ferenc tér and Ferenciek tere were inaugurated, with the participation of Gergely Karácsony and Tibor Bolla.
- On 20 March, the last two renovated underground stations of the M3 metro line in the city centre, Arany János utca and Nyugati Railway Station, were opened to the public. At the inauguration ceremony held at Arany János utca station, speeches were given by Tibor Bolla, CEO of BKV, Dr. Tibor Navracsics, Minister of Regional Development, and Gergely Karácsony, Mayor of Budapest.
- On 22 May, the renovation of the M3 metro line was completed, with the opening of the Nagyváradi tér and Lehel tér stations. The event was addressed by CEO Tibor Bolla, Mayor Gergely Karácsony, and representatives from the government and from EU partners.

The renovation of the line was accompanied by cultural events and programmes.

- The renewed Deák Ferenc tér station of the M3 metro line was transformed into a concert hall for a single evening on 11 January, a week and a half before the official opening. The songs performed by the Budapest MediCantare Choir and the Vox Insana Chamber Choir were the sounds of gratitude. For the first time in the history of the M3 metro, a station hosted a concert.
- The third and last creative competition for children, the M3 metro renovation from a different perspective, was organised with an unexpected success. The awards ceremony, held on 1 March, was met with great interest.

A key element of 2023 was our Company's participation in the "Budapest 150" celebrations.

- Budapest 150 – Public transport in the era of urban reunification: 26 panels in the metro gallery of the M2 metro train showcased the capital's transport history.
- On 6 May, our "From Colour to Colour" programme offered 150 passengers free heritage rides between three BKV tram depots. Passengers registered for the programme were also

given a glimpse into the history of the remises.

- The exhibition 150 years – 150 transport events opened on 24 June, on the Night of Museums, at the Millennium Underground Museum in Deák tér. It proved to be the most popular temporary exhibition in recent years, achieving record attendance numbers.
- The 7 stations of the renewed M3 metro awaited visitors of the Metro Festival with music and theatre programmes for two days.
- Between 25 September and 8 October, the Nonstop Budapest exhibition in the Kristály theatre on Margaret Island provided insights into the activities of Budapest's 150-year-old public service companies, where BKV presented the history of public transport in Budapest.
- On tram line 49, the Bulivillamos (Party Tram) ran for 3 days to celebrate the capital city's birthday. On Budapest's 150th birthday, 17 November 2023, visitors could visit the BKV Millennium Underground Museum in the underpass of the Deák Ferenc tér terminal station for a mere HUF 150 entrance fee.
- Our transport history competition was another opportunity for participants to share their knowledge of Budapest's 150 years of public transport. 59 teams entered the contest announced for the 13th time at the end of September. 8 primary school teams competed in the finals, held on 8 December.

With regard to the 90th anniversary of the Budapest trolleybus in 2023:

- between 7-9 November, BKV, Szeged Transport Company and Mobilissimus mobility planning workshop organised a three-day international conference on the sustainable future of trolleybus transport.
- On 16 December 1933, the day of the introduction of the very first tram route, BKV held a commemoration at the former Óbuda depot, the current Bécsi út/Vörösvári út tram terminus. The participants laid a wreath at the memorial plaque of the first trolleybus service, followed by a commemorative procession on the former Óbuda trolleybus line between Bécsi út terminus and Óbuda Bus Garage. László Szedlmajer, Deputy General Manager of BKV Bus and Trolleybus Operations gave a speech at the event.

Our Open Days in 2023 also gave thousands of people a behind-the-scenes look at BKV:

- on 29 April, the BKV 2023 Open Day series started in the Zách utca trolleybus garage
- On 20 May, the Óbuda Division hosted an open day linked with Children's Day
- On 2 September, the 40-year-old South Pest Bus Garage opened its gates.



In 2023, economic circumstances once again allowed us to organise perhaps the most popular event in our municipality, the launch and Advent operation of the illuminated fleet.

- BKV's 2023 festive illuminated fleet consisted of nine decorated vehicles. The vehicles – with the exception of the Cogwheel Railway – all left the Hungária depot simultaneously in the early evening of 1 December. The six light trams and two light buses were launched by Gergely Karácsony, Mayor of Budapest, and Tibor Bolla, CEO of BKV.
- On 6 December 2023, the Santa bus was once again back on the 105 and 210 lines.
- This year, BKV and BKK provided the opportunity to photograph the festive illuminated fleet at night. During this special photo shoot, transport lovers and vehicle photographers alike could take pictures of the decorated UV, KCSV and Tátra trams, as well as various surprise vehicles, on the night of 27 to 28 December 2023.

In 2023, we also showed our Company's commitment to culture and that social responsibility is an important element of BKV's corporate philosophy by joining several external events and initiatives:

- thanks to the cooperation of BKV, BKK and the Ferencváros Cultural Centre and its Institutions, on 20 January, we once again – as is tradition – welcomed our passengers with short cultural programmes at the galleries of the M4 stations at Kálvin tér and Fővám tér in honour of the Day of Hungarian Culture;
- in February, in response to the call of the International Union of Public Transport (UITP), the company joined the Lecco Declaration, which promotes accessible public transport systems for all, with the signature of Tibor Bolla, CEO;
- on 11 May, for the ninth time, the Culture of Transport Day events raised awareness across the country on the importance of improving road safety, promoting a culture of public and environmentally aware transport. BKV organised related programmes in four locations, where our staff presented practical demonstrations and lectures on various hazards and how to avoid them;
- on 15 July, we joined the 8th Night of the Chairlift with the Zugliget Chairlift;
- on 16 and 17 September, as part of the Cultural Heritage Days series of events, BKV once again showcased its work in preserving the culture of transportation. The company's museums on Deák tér and in Szentendre were open to the public free of charge this weekend, and – exceptionally – the Ferenc power substation was also opened to the public;
- On 13 November, an exhibition on the history of the city, entitled Our Heritage, Budapest, opened on the metro trains. The exhibited contemporary photographs, drawings and documents were selected by the staff of the Szabó Ervin Library of Budapest, in order to mark the anniversary of the unification of the capital 150 years ago.



To reinforce our online presence, our new BKV website was launched in June. By analysing previous search and visit results, we restructured the site to make relevant information more easily accessible to users. In 2024, we also plan to redesign the careers page linked to the site.

The website redesign, which started in 2022, also affected the English-language version. As part of our focus on the international environment, the English language version of the website was renewed from static to dynamic English language uploads, with ongoing translations, especially for content in which foreign visitors are expected to be interested.

## **International events of 2023**

We were actively involved in the work of the UITP Marketing and Product Development Committee, and our colleague completed her four-year term as Vice-Chair in June 2023, following her re-election. Through our presentations at the bi-annual face-to-face meetings and the occasional online meetings, we helped raise awareness of BKV's communication activities and gain experience of similar work by other companies abroad. In these forums, we also exchange views on what way the different transport companies are affected by the war between Russia and Ukraine.

We are in correspondence to prepare the delivery of one of our Ganz trams to Brazil in 2025, when it will be removed from service. Contact was initiated in the autumn of 2023 by Luis Guimarães, President of the Archive and Memory Foundation, with the aim of expanding Latin America's only "living" tram museum, located in Santos, Brazil.

## **Press activity in 2023**

Number of press releases: 93

Number of press enquiries: 334

### **Topics:**

- January: passenger insurance, accident statistics, M3 renovation, leaks
- February: M3 renovation, recruitment, Russian sanctions, D14 renovation, advertising tender,
- March: shipping, advertising tender, M3 renovation
- April: Budapest internal auditor compliance report, accidents
- May: M3 renovation, lifesaving driver on tram 52, M4 shutdown, cog-wheel railway vandalism, recruitment
- June: Húvösvölgy renovations, trolley fire,

- July: recruitment, Hűvösvölgy renovations, Night of the Chairlifts, Millennium Underground Museum exhibition,
- August: Hűvösvölgy renovations, recruitment, accidents
- September: recruitment, tramway renovation
- October: recruitment of foreign drivers, drivers' bonuses,
- November: recruitment, party tram
- December: light fleet, M3 flooding,

## Recruitment activity in 2023

Recruitment and brand building are closely linked in our external communication activities, as they can be successful together. In our ongoing recruitment campaigns over the years, we always strive to sneak a little extra into the messaging and/or the creative presentation – something that sets us apart from former presentations. This year's primary message also refers to the 150th anniversary of Budapest, highlighting the importance of the work done by BKV employees: "Our work – our city!", this slogan can be read on the sides and inside our vehicles.

We once again used photos of our own employees to illustrate the message. We did this for two reasons: on the one hand, because one of our strongest messages is that our employees are willing to put their faces to their work, smiling at the camera in their uniforms, and on the other hand, because the internal communication message is equally important: those who may appear in these ads receive confirmation that their work is appreciated by their employer. This concept continues to be successful with both employees and target audiences.

In 2023, we also ran recruitment ads on two TV channels, adding a previously unused channel to our annual campaign in both spring and autumn. In the spring, we appeared 6 times on TV2's Sunday series "I'm going to be successful!", which highlights occupations experiencing labour shortages. We presented our jobs in 5-minute interviews, focusing on jobs where recruitment is continuous throughout the year, such as:

- electric vehicle maintenance engineer
- escalator mechanic
- metro maintenance technician
- tram driver
- bus driver
- trolleybus driver

We can also easily reach the younger generation through our TikTok channel, which was launched in 2022. Our content is popular, making the BKV brand more than just public transport for the under-30-year-old population. Targeting young people is also very important, as one of the aims of recruitment is to reach and attract persons under 30 to work at our company.

Our LinkedIn platform is also focused on a narrower target group – we are mostly looking for colleagues for white-collar, or intellectual, jobs. Our visibility on this platform is not yet high, as the jobs advertised here are not the main profile of our Company. We are always looking for ways to improve our visibility.

Our Facebook pages continue to grow in popularity, and the number of our followers continues to rise.

**Our Facebook results:**

- about 1,300,000 hits
- 24,600 followers (60% men, 40% women) (50% of them from Budapest)
- our Facebook videos were watched 2.5 times as in 2022
- our official Facebook page was visited more than three times as often as in previous years, almost 300,000 times
- we had 1,044 entries

Our primary themes in 2023 were:

- our most popular posts this year were once again photos of BKV vehicles received from our passengers
- we regularly published photos from the Fortepan database, showing both the recent and the more distant past: public transport in Budapest in the 20th century
- for years, we have been presenting new seasons of our BKV Vlog – originally posted on YouTube – on our Facebook channel, as well as reruns of older episodes
- we regularly showcase the souvenirs we sell in our museums and relic shops
- we also posted about the trams, heritage buses and retro buses that run on weekends during the spring-autumn heritage season
- we also report regularly on the latest news from our museums
- we often promote the Budapest Castle Hill Funicular and the Zugliget Chairlift, in the form of programme recommendations for weekends
- upgrading the M3
- from time to time, we showcase the social platforms on which we are present
- we also keep sharing posts on our Careers FB page

- this year, [enbudapestem.hu](http://enbudapestem.hu) regularly published articles on the past of public transport in the capital city, which we continued to share
- we often share videos of transport enthusiast YouTubers or posts from FB groups that show an interest in public transport in the capital city
- in addition to our posts, the popularity of short messages also resulted in a lot of content about BKV in the Facebook “Stories” menu item this year

#### Our Career Facebook results in 2023

- around 166,000 hits, a 32% increase compared to the previous year
- 2,219 followers (66% male, 34% female)
- nearly 210 entries
- announcement of our training course for persons in possession of a “B” driver’s licence

#### YouTube

- 3,579 subscribers – a growth by 350 subscribers in a year
- 13, mostly externally produced videos
- total viewership: 67,460.
- most popular: the recruitment video shot in Óbuda – 38,736

#### TikTok

- 9,300 followers – increased by 1,200 in the last 2 months of the year (the system does not provide annualised data)
- 154,000 likes
- 37 videos, mostly self-produced
- total views: 2,006,000.
- most popular video: BKV drivers’ competition – bus tasks – 970,000

#### LinkedIn

- this year, we already posted on this platform, with 283 followers seeing 23 of our posts

## Museum data

### Szentendre Urban Public Transport Museum

- Number of visitors: 23,265 persons
- Ticket revenue: HUF 4,731,060
- Millennium Underground Museum
- Number of visitors: 23,172 persons
- Ticket revenue: HUF 5,364,857
- Revenue from the Night of Museums: HUF 1,052,300
- Total ticket revenue: HUF 6,419,157
- Total:
- Number of visitors: 46,437 persons
- Ticket revenue: HUF 11,150,217

### Sales revenues from souvenirs

- Millennium Underground Museum: HUF 7,483,272 + VAT
- Urban Public Transport Museum: HUF 4,599,753 + VAT
- Total: HUF 12,083,025 + VAT

### Museum shooting/photography:

- Urban Public Transport Museum: HUF 301,300 + VAT
- Millennium Underground Museum: HUF 3,172,500 + VAT
- Total: HUF 3,473,800 + VAT

## Shooting/photography revenue

2023 saw 441 film shooting and photography permits issued. From the recordings, BKV received total revenues of HUF 62,240,061 + VAT, consisting of:

- Special service: HUF 15,335,630 + VAT
- Area use and specialist supervision: HUF 45,644,520 + VAT
- TVG rental: HUF 1,259,911 + VAT

## Customer relations and lost and found services in 2023

In 2023, we continued to be popular as correspondent partners: we responded to 9,920 customer reports.

Many of our passengers lost their belongings on our vehicles; our Lost and Found Service received 15,607 parcels, representing 49,930 items. The high numbers suggest that not only our colleagues, but also our passengers correctly deliver to us what others have lost.

Unfortunately, the number of items that we were able to return is much lower: 2,305 packages, 12,863 in total.

We continue to work with the Budapest Police Headquarters to make their job easier: they receive a list of the items handed in to us, so they do not have to treat them as stolen, and can close the relevant investigation.

On the basis of the monthly HUF 800,000 + VAT paid by MÁV-HÉV, the net revenues generated at our Lost and Found Service amounted to HUF 9.6 million.

<b>periodic report: 01-01-2023 – 31-12-2023</b>		
	<b>package</b>	<b>item</b>
<b>found object</b>	<b>15,607</b>	49,930
<b>release at customer service</b>	<b>2,305</b>	12,863
<b>release (invoice) (handling fees)</b>	<b>2,244</b>	12,496
release (0)	61	367
release on-site / in vehicle	0	0
documents sent	1,609	3,258
sold (BáV)	0	0
destroyed	1	2
package containing cash	1,204	1,479
cancelled	5	61
handling fees: HUF (2244 X -1)	855,300	

## Internal communication

In 2023, much like in previous years, our colleagues received up-to-date information on the most important events, changes and updates through our internal communications channels (email, intranet, e-newsletter, Mozgásban magazine). These included notices such as the publication of new CEO instructions and circulars, news from IT, the Human Resources Department, the Labour and Social Affairs Department, the Education Department, the Department for Organisation and Operational Development. Some of the news included salary agreements, changes to the Cafeteria scheme, vaccinations, internal job offers, the conditions of access to workers' hostels, internal exchanges of the Commercial Department, as well as discounted holiday and summer camping and sports opportunities.

During the past year, we were also involved in the organisation of the Core Team Award Ceremony, the Idea Management Gala, the Mór Balázs Award Ceremony, and the Who We Are Proud Of Certificate Award Ceremony. We managed and updated former employee discounts, and concluded new cooperation agreements. As a result, BKV employees may now enjoy the services offered by Puchner Castle Hotel in Bikal, among others, at a discount.

The BKV events related to Budapest's 150th anniversary were treated as important and high-priority tasks. The Heroes of Budapest campaign, which started in early June and ended with a gala organised at the end of November, was successfully carried out in cooperation with Budapest Brand nZrt. As a result, 5 of our employees were introduced to people living in and visiting the capital city. In the final days of the year, we organised free skating for BKV employees' children in the City Hall Park, as a way to close the year.





# 'A' BALANCE SHEET ASSETS

(M Ft)

Ser. number	Description	2022.12.31	2023.12.31
<b>A.</b>	<b>Non-current assets</b>	<b>718 959</b>	<b>720 412</b>
<b>I.</b>	<b>Intangible assets</b>	<b>1 060</b>	<b>994</b>
I.	Concessions, licenses and similar rights	151	167
2.	Intellectual products	909	827
<b>II.</b>	<b>Tangible assets</b>	<b>716 599</b>	<b>718 128</b>
I.	Land and buildings and related property rights	378 646	373 769
2.	Plant and machinery, vehicles	251 696	235 898
3.	Other equipment, fixtures and fittings, vehicles	3 194	2 873
4.	Investments, renovations	67 521	105 588
5.	Advance payments for assets under construction	15 542	0
<b>III.</b>	<b>Financial investments</b>	<b>1 300</b>	<b>1 290</b>
I.	Long-term investments in related parties	1 267	1 267
2.	Other long-term investments	19	19
3.	Other long-term loans granted	14	4

<b>B.</b>	<b>Current assets</b>	<b>32 189</b>	<b>22 952</b>
<b>I.</b>	<b>Inventories</b>	<b>10 203</b>	<b>10 715</b>
1.	Materials	10 149	10 689
2.	Work in progress and semi-finished products	30	15
3.	Goods	24	11
<b>II.</b>	<b>Receivables</b>	<b>9 463</b>	<b>6 760</b>
1.	Trade receivables	697	792
2.	Receivables from related parties	1 204	224
3.	Receivables from companies in significant shareholding relationships	8	27
4.	Receivables from other participating interests	0	1
5.	Other receivables	7 554	5 716
<b>III.</b>	<b>Securities</b>	<b>0</b>	<b>0</b>
<b>IV.</b>	<b>Cash and liquid assets</b>	<b>12 523</b>	<b>5 477</b>
1.	Cash, cheques	67	78
2.	Bank deposits	12 456	5 399
<b>C.</b>	<b>Prepayments and deferred expenses</b>	<b>1 914</b>	<b>5 325</b>
1.	Accrued income	1 498	4 270
2.	Prepaid expenses	416	1 055
<b>TOTAL ASSETS</b>		<b>753 062</b>	<b>748 689</b>

# 'A' BALANCE SHEET LIABILITIES

(M Ft)

Ser. number	Description	2022.12.31	2023.12.31
<b>D.</b>	<b>Equity:</b>	<b>186 224</b>	<b>157 763</b>
<b>I.</b>	<b>Subscribed capital</b>	116 000	116 000
	of which: repurchased holding at face value	0	0
<b>II.</b>	<b>Subscribed but not paid up capital (-)</b>	0	0
<b>III.</b>	<b>Capital reserve</b>	79 908	79 908
<b>IV.</b>	<b>Retained earnings</b>	16 450	-9 757
<b>V.</b>	<b>Tied-up reserve</b>	73	73
<b>VI.</b>	<b>Valuation reserve</b>	0	0
<b>VII.</b>	<b>PROFIT/LOSS AFTER TAXES</b>	<b>-26 207</b>	<b>-28 461</b>
<b>E.</b>	<b>Provisions</b>	<b>187</b>	<b>223</b>
I.	Provision for expected liabilities	187	223
<b>F.</b>	<b>Liabilities</b>	<b>87 916</b>	<b>75 298</b>
<b>I.</b>	<b>Subordinated liabilities</b>	<b>0</b>	<b>0</b>

<b>II.</b>	<b>Long-term liabilities</b>	<b>19</b>	<b>0</b>
I.	Other long-term liabilities	19	0
<b>III.</b>	<b>Short-term liabilities</b>	<b>87 897</b>	<b>75 298</b>
I.	Advance payments received from customers	27	0
2.	Liabilities from the supply of goods and services (trade creditors)	48 377	40 298
3.	Short term liabilities to affiliated undertakings	1 418	14 995
4.	Short-term liabilities to companies linked by virtue of major participating interests	0	0
5.	Amounts owed to undertakings with which the company is linked by virtue of participating interests	26	61
6.	Other short-term liabilities	38 049	19 944
<b>G.</b>	<b>Accruals and deferred income</b>	<b>478 735</b>	<b>515 405</b>
I.	Accrued income	708	660
2.	Accrued costs and expenditures	3 505	3 441
3.	Deferred income	474 522	511 304
<b>TOTAL LIABILITIES</b>		<b>753 062</b>	<b>748 689</b>

# INCOME STATEMENT (TOTAL COST METHOD)

(M Ft)

Ser. number	Description	2022. év	2023. év
1.	Domestic sales revenue, net	161 112	174 310
2.	Net export sales revenues	77	33
<b>I.</b>	<b>Net sales revenue (1+2)</b>	<b>161 189</b>	<b>174 343</b>
3.	Changes in self-manufactured inventories	5	-15
4.	Capitalised value of self produced assets	1 184	867
<b>II.</b>	<b>Own performance capitalised (3+4)</b>	<b>1 189</b>	<b>852</b>
<b>III.</b>	<b>Other revenues</b>	<b>19 582</b>	<b>21 111</b>
	of which: reversed impairment	21	10
5.	Material cost	54 296	54 737
6.	Cost of services used	31 602	35 476
7.	Value of other services	1 091	1 409
8.	Cost of goods sold	1 016	1 030
9.	Value of services sold (mediated)	574	608
<b>IV.</b>	<b>Material type expenditures (5+6+7+8+9)</b>	<b>88 579</b>	<b>93 260</b>
10.	Payroll cost	68 883	78 678
11.	Other staff related disbursements	7 277	5 754

12.	Contributions and taxes on wages	9 722	10 707
<b>V.</b>	<b>Staff costs (10+11+12)</b>	<b>85 882</b>	<b>95 139</b>
<b>VI.</b>	<b>Depreciation write-off</b>	<b>32 604</b>	<b>33 347</b>
<b>VII.</b>	<b>Other expenditures</b>	<b>1 312</b>	<b>2 089</b>
	of which: impairment	338	64
<b>A.</b>	<b>OPERATING (BUSINESS) PROFIT AND LOSS (I+II+III-IV-V-VI-VII)</b>	<b>-26 417</b>	<b>-27 529</b>
13.	Dividends and profit-sharing received	5	41
	of which, from related parties	0	0
14.	Other interest received (due) and similar income	93	77
	of which, from related parties	1	1
15.	Other income from financial transactions	184	8
<b>VIII.</b>	<b>Income from financial transactions (13+14+15)</b>	<b>282</b>	<b>126</b>
16.	Other expenditures on financial transactions	64	1 052
17.	Other expenditures on financial transactions	8	6
<b>IX.</b>	<b>Expenditures on financial transactions (16)</b>	<b>72</b>	<b>1 058</b>
<b>B.</b>	<b>PROFIT/LOSS OF FINANCIAL TRANSACTIONS (VIII-IX)</b>	<b>210</b>	<b>-932</b>
<b>C.</b>	<b>PROFIT BEFORE TAXES (A+B)</b>	<b>-26 207</b>	<b>-28 461</b>
<b>X.</b>	<b>Tax payable</b>	<b>0</b>	<b>0</b>
<b>D.</b>	<b>PROFIT AFTER TAXES (C-X)</b>	<b>-26 207</b>	<b>-28 461</b>