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Foreword by the Chief Executive Officer



In year 2015 BKV Zrt was again doing its best to ensure that the service level of community transportation in Budapest increase further, so that the passengers could also feel the improvement.

In the spirit of betterment, our renewals and vehicle purchases continued.

The Company acquired 18 more of the buses assembled in the successful and rightly popular PKD arrangement. The tender announced for the purchase of 15 low-floor buses (plus an option to buy 60 additional vehicles) was closed successfully, as a result of which in April 2015—for the first time since 2006—the fleet of BKV Zrt was augmented with fully equipped new buses. We signed an agreement for the purchase of 20 electric midibuses and the charging stations necessary for their operation, which is something I am truly proud of, since as a result of this a fleet of 100% electricity driven buses will operate for the first time in Hungary. From Utrecht, the Netherlands, we bought 25 Van Hool New AG300 low-floor

articulated buses in good condition, and our Van Hool New A330 CNG propelled fleet was further enlarged as well. We launched 23 M-B Citaro and 24 Volvo 7000 low-floor solo buses as well.

Forward looking and development are important not only in the bus business of course. The reconstruction of five TW6000 trams was completed, and the reconstruction—coupled with propulsion modernisation—of our Tatra (T5C5) trams was continued. Two of our Combino vehicles joined the FUTÁR traffic management and passenger information system, and their passenger compartments are also equipped with video surveillance and WI-FI systems. We thought of cyclists as well, and increased the bicycle transportation capacity of cogwheel trams; now it is possible to accommodate and fasten 16 bicycles per train.

In metro line M4, in the trains running in fully automatic operation, driver's and control activities gradually ceased, then the presence of train attendants was abandoned as well.

This year one of the most important tasks was the administration of the public procurement procedure announced for the reconstruction and modernisation of the vehicle fleet of metro line M3 and the delivery of the related services and equipment.

We did not forget about the trains of the suburban railway system (HÉV) either: the modernisation of the dashboards of the driver's cabins of MX and MXA multiple units continued, and in the scope of an investment pilot project BKV Zrt participated in the preparation as well as the implementation of the renewal of the passenger compartment of a three-car MXA multiple unit.

As regards regular boat lines, the Company is endeavouring to enlarge its service range, and improve the travel circumstances. To this end, two 150-person water bus type boats of ours received environmentally friendly main engines and new power units, and on two water buses open upper decks were installed for our passengers. The modernisation and enlargement of our boats will continue in the future as well according to the possibilities.

The lighting system of the M2 metro engine repair shop was reconstructed, in the bus depots of the Kelenföld and South-Pest Divisions industrial speed gates were installed, and the track reconstruction of the Grand Boulevard and "large panel" rail replacements on several tramway lines were implemented. Besides these, line reconstructions, in the case of M3 metro rail replacements, and as regards the suburban railway (HÉV) rail, overhead power line cable and safety equipment reconstructions also occurred, and there were other infrastructure projects as well to make us proud.

In conclusion, the goal did not change in 2015 either, and it is to fulfil our tasks envisaged in the Public Service Contract at the highest level expected of us.



PUBLIC SERVICE CONTRACT

Public Service Contract

The Company fulfils regular public transport services in accordance with the Public Service Contract concluded between BKV Zrt and BKK Zrt on 28 April 2012.

Under the Public Service Contract, BKK as a customer orders regular transportation services — defined according to sectors — stipulating quantity and quality requirements and the detailed rules of the public service, including rules for the compensation of public service costs. The Public Service Contract was last amended by the parties in August 2015, which was necessary in view for ensuring the funds required for the reconstruction and modernisation of the vehicle fleet of metro line M3 from capital reserves, and changing the term of using such funds.

The customer's requirements concerning the given timetable year, and the related terms of financing are set out in the Annual Agreement constituting an integral part of the Public Service Contract. Considering that the public service is ordered in cycles corresponding to timetable years (from 1 September to 31 August of the next year), it was in year 2015 that the public service delivered in timetable year 2014/2015 was evaluated, the related financial settlements took place, and the Annual Agreement for timetable year 2015/2016 was concluded.

The appropriate quality level of the services is encouraged by expectations defined by BKK Zrt. and the application of the incentives/sanctions associated with these.

It shows the improvement of the service level provided by BKV Zrt that in timetable year 2014/2015—in accordance with the mileage index measuring compliance with performance criteria—the Company achieved a bonus result of significant extent, even against more severe performance ranges. As regards the accident indicator, among the three concerned surface sectors the indicator improved significantly at the bus and trolleybus sectors as compared with the previous timetable year, while the tramway sector retained the same bonus category it had in the previous timetable year. Compliance with quality requirements also moved in a favourable direction, because as compared with the previous timetable year the amount of annual penalties paid in relation with the public service decreased significantly.

The Company fulfilled its reporting obligation in accordance with the provisions of the Public Service Contract. In the scope of the monthly and quarterly reports and the Service Reports, BKV Zrt described the fulfilment of the ordered public service and its economic dimensions.



CONTROL SYSTEMS

Control systems

Quality control systems according to the MSZ EN ISO 9001:2009 standard

It reflects BKV's commitment to quality that in year 2015 it again enlarged its range of activities covered by quality control systems as per the ISO 9001 standard. The quality control system concerning the energy management processes of BKV Zrt was introduced in September 2015, and since then has operated in a certified manner. The quality control systems concerning the education and investment processes of BKV Zrt as well as its public transport activities carried out with buses and trolleybuses, and those of the bus testing stations continued to operate successfully and passed supervisory audits as well.

Environment-focused control system according to the MSZ EN ISO 14001:2005 standard

The operation of an environment-focused control system ("KIR") by BKV Zrt—besides the need for an environmentally friendly operation—was also necessitated by a requirement of the financing bank connected to the purchase of ALSTOM metro cars. The certificate testifying the successful certification of the system was valid until 12 July 2015. In view for ensuring the effective operation of the KIR system, continuous compliance with and development of the system requirements was indispensable. At the renewal audit implemented on 25 June 2015, after an examination of the documents, and an on-site survey of the plants, warehouses, storage facilities and the outdoor spaces, the external independent, accredited entity found the entire area of the metro vehicle depot located on Fehér út to be suitable for the further operation of KIR without limitations.

Energy control system according to the MSZ EN ISO 50001:2012 standard

In view for compliance with Act LVII of 2015 on Energy Efficiency, in October 2015 the Management of the Company took decision on the implementation of an energy control system as per the MSZ EN ISO 50001:2012 standard and the certification of the same by an external independent certification body, which is expected to take place at the end of year 2016.



INVESTMENTS, DEVELOPMENTS

Investments, developments

Vehicle purchases, overhaul and modernisation

In 2015 we carried on with our recently launched vehicle fleet reconstruction and modernisation program in order to reduce the average age of vehicles, render the fleet more homogeneous, make sure that environmental indicators will improve, implement accessibility and further increase service level, as well as in view for a technically reliable operation.

The average age of the buses operated by the Company fell significantly, mainly due to the fact that in 2015 we again had the opportunity to refresh our fleet with new buses as well as with used ones that are nevertheless in good condition.

- Vehicles assembled in our own competence in PKD arrangement

Among our vehicle purchases Ikarus 127V2 type solo, low-floor buses manufactured in the PKD (“Partially Knocked-Down kit”) arrangement should be emphasised, where the assembly and varnishing of the vehicles and the implementation of their interior space were done by the Company, which proved to be a more cost-efficient method than purchasing complete vehicles, and besides the design of the vehicles is completely tailored to the needs of Budapest passengers. Considering favourable operating experiences, as well as the costs of purchase, the 18 vehicles ordered in 2014 were followed in 2015 by the purchase of 18 additional buses, already under the name of Modulo 108D, furnished with power sources meeting Euro 6 emission norms.

- Mercedes-Benz Conecto purchase

At end-2014, the tender announced for the purchase of 15 low-floor buses (plus an option to buy 60 additional vehicles) was closed successfully, as a result of which in April 2015—for the first time since 2006—the fleet of BKV Zrt was augmented with fully equipped new buses. The vehicles were received with 300 horsepower drivetrains meeting Euro 6 environmental norms, and are operated at extremely favourable consumption and technical availability indicators.

- Subsidy agreement for the purchase of electric buses

On 15 December 2015, the chairman and chief executive officer of BKV Zrt Tibor Bolla and minister of national economy Mihály Varga signed an agreement for the purchase of 20 electric midibuses and the charging stations necessary for their operation, which was one of the most significant events of recent years, all the more so because a fleet of 100% electricity driven buses will operate for the first time in Hungary. In accordance with the subsidy agreement, the Ministry for National Economy—appreciating BKV’s previous efforts—provided a non-repayable subsidy of about HUF four billion to enable the purchase of 20 new, low-floor and environmentally friendly Modulo Medio Electric buses, contributing to the further development of the Company and the improvement of its market position. The zero emission buses ensure accessible traffic for disabled persons, and their operation is also favourable.

- Buses purchased second-hand

By continuously monitoring potential Western-European used vehicle markets we are looking for homogeneous fleets consisting of at least 15-20 vehicles with a fair value for money that are suitable for purchase, also acting as a catalyst for the renewal as soon as possible of the outdated fleet. As a result of such efforts, in 2015 we bought 25 Van Hool New AG300 low-floor articulated buses in good condition from Utrecht, the Netherlands. Manufactured in 2005, the vehicles underwent a refurbishment image-wise as well as aesthetically in the course of their naturalisation process, and were also equipped with passenger information equipment based on state-of-the-art LED technology.

The further enlargement of our Van Hool New A330 CNG propelled solo vehicle fleet should also be mentioned, where with 13 additional buses purchased from Switzerland—manufactured in 2004-2006—our environmentally friendly fleet already consists of 49 vehicles. This vehicle type runs with a pollutant emission 70 percent lower than diesel engines, and also generates 35 tons less flue dust emission per year.

In the course of year 2015, we additionally launched 23 M-B Citaro and 24 Volvo 7000 low-floor solo buses as well, which offer a significantly more environmentally friendly and comfortable travel alternative with their Euro 3 and Euro 5 power sources than the previous high-floor Ikarus buses that only met Euro 0 norms.

Vehicles operated by BKV Zrt (procurement by BKK Zrt)

- Karsan Atak

Instead of the Ikarus 405 type—which cannot be operated any longer economically—we needed new midibuses suitable for the special downtown and Buda lines. The Karsan Atak midibuses were purchased by BKK Zrt., and our Company is responsible for their operation. BKK Zrt. as a customer purchased 16 vehicles under the supply agreement, each of which were admitted into the operative fleet on 19 November 2015. The vehicle type has Euro 6, 186 HP power source, and serves the transportation needs of passengers with a low-floor and air-conditioned passenger compartment.

- Solaris-Skoda trolleybuses

The financial value of the vehicle development project implemented under the ownership of BKK Zrt., but with our active participation as an operator is HUF 46 billion (tramways and trolleybuses together), of which the extent of the subsidy is 99.33%. Under the agreement, until 15 December 2015 we received 14 solo and 10 articulated, then as a further option 6 solo and 6 articulated, low-floor trolleybuses from the Solaris-Skoda Electric syndicate. The vehicles were purchased and are owned by BKK Zrt., the entity ordering the service, and BKV Zrt is involved as an operator. With their state-of-the-art zero emission low-floor service, the vehicles will be a replacement for the Ikarus 280T trolleybuses, which have an average age of almost 30 years, and an average mileage of 1,200,000 km.

Vehicle purchases within the tramway sector

- The Company managed to purchase 10 used TW6100 tramways from Hanover, which are integrated well in our vehicle fleet. The trams have arrived at Budapest continually starting from the year-end, and will be available for the passengers after their reconstruction.

Trams operated by BKV Zrt (procurement by BKK Zrt.)

- During the year, the CAF tramways purchased and launched by BKK Zrt. and taken over by us for operation also contributed to the renewal of our tramway fleet. By end-2015, from the shorter (34.1 metres long) CAF tramways 25 trains were launched in passenger traffic, and 10 additional trains will arrive in 2016. The longer tramway (actually the longest passenger tramway in the world, being 55.9 metres long) was presented to the representatives of the press on 6 November, and their arrival was closed in 2016.

Modernisation of the vehicles of the tramway sector also continued.

- The reconstruction of 5 TW6000 tramways were completed. The completed job typically meant the all-inclusive reconstruction of the bogies and their main engineering units, anti-corrosive protection, and the renovation of the passenger compartment.
- The reconstruction and propulsion modernisation of the Tatra (T5C5) motor cars — which make up more than 50% of our tramway fleet—continued. In 2015, propulsion modernisation (carried out simultaneously with the cyclical reconstruction) was completed on 28 trams, with the establishment of a new propulsion system that ensures a high degree of automation, the installation of a computer-driven control system, the building in of new, individual door control, and the image renewal of passenger compartments.
- In the second half of year 2015, we entered into an agreement for the reconstruction and propulsion modernisation of 24 cars out of the KCSV7 tram motor car series (consisting of 30 vehicles). Under the framework agreement, the reconstruction started, and 2 vehicles were already completed by the year-end.
- Adapting to modern circumstances, in two Combino vehicles connection to the FUTÁR passenger information system was implemented as a prototype, and in the passenger compartment video surveillance and Wi-Fi systems were installed, whose testing has started.
- Based on plans prepared in 2014, due to significant use by cyclists, the bicycle transportation capacities of cogwheel trams was increased. The enlargement of the 7 cogwheel trains with room for bicycle transportation was finished by the autumn, and the vehicles received their operating licenses from the National Transport Authority. Each train is able to accommodate 16 bicycles, which can be fastened on the hooks of the stirrups on the upper part of the subframes and in the grooves created on the underside of the folding seats.

Metro modernisations

- As regards underground rail transport, in metro line M4, in the trains running in fully automatic operation in passenger service, driver's and control activities gradually ceased according to the predefined schedule, then the presence of train attendants was abandoned as well. As a result of this, starting from 26 September 2015 the trains have been running without train attendants.
- Selective door opening was introduced both in lines M2 and M4.
- In 2015 one of the most important tasks was the administration of the public procurement procedure announced for the reconstruction and modernisation of the vehicle fleet of metro line M3 and the delivery of the related services and equipment, which was completed according to the schedule. The vehicles of metro line M3 underwent workshop repair, in a significant part of them the passenger information systems were also replaced, and their audit for further operability was carried out.

Direction of development of suburban railway vehicles

- As regards the trains of the suburban railway system, the modernisation of the dashboards of the driver's cabins of MX and MXA multiple units continued, and in the scope of an investment pilot project BKV Zrt participated in the preparation as well as the implementation of the modernisation of the passenger compartment of a three-car MXA multiple unit.

Public water transport

- As regards regular boat lines, the Company is endeavouring to enlarge its service range, and improve the travel circumstances. To this end, two 150-person water bus type boats of ours received environmentally friendly main engines and new power units, and on two water buses open upper decks were installed for our passengers. The modernisation and enlargement of our boats will continue in the future as well according to the possibilities.

Investments resulting in progressive cost saving

Reconstruction of the lighting system of the metro line M2 engine repair shop (Fehér út)

The existing artificial lighting failed to provide sufficient luminance, as instead of the required 300 lux value the illumination of the working area was only 154 lux, and in the small workshop only 53.2 lux.

In the course of the reconstruction, new, modern lamp bases of larger output (2x58 W) were installed with new high-flux fluorescent lamps (57 fluorescent lamp armatures, 1 metal halogen reflector), therefore with the use of modern lamp bases there is satisfactory luminance to illuminate the working spaces, and operating costs are expected to decrease, as ~ 11 kW may be saved per working hour.

Installation of industrial speed gates in the bus depots of the Kelenföld and South-Pest Divisions

In the scope of the investment project, 2 industrial speed gates were installed in the Kelenföld bus depot, and 3 in the South-Pest bus depot. As a result of the slow operation of traditional gates, the hall used to have significant heat loss in the winter season. The speed gates installed as a supplement to the existing gates operate about four times faster, therefore a great deal of energy may be saved, and the working conditions of the employees are also improved.

Track reconstructions

Track reconstruction of the Grand Boulevard with roadbed change

In the Grand Boulevard, in the section between Tátra utca and Aradi utca, the reconstruction of the tramway rail with roadbed change was implemented in a length totalling 2,355 rail metres. The earlier Gantry RAFS roadbed was replaced by a more modern embedded rail system that requires less maintenance work. In the course of the reconstruction, the rail connection at Aradi utca was replaced, and the entire track was covered with heavy-duty basalt concrete pavement. As a result of the reconstruction, there are no more slow zones in the concerned section, whereby travel times have decreased.

Large panel rail replacements

The “large panel” track reconstruction program continued, in the course of which rails were replaced in the following tramway lines:

- Along tramway line 62/69, in Erzsébet királyné útja (District XIV), between Balázs utca and Rákospatak utca, large panel tracks totalling 224 rail metres and block rails totalling 33 rail metres were replaced
- Along tramway line 51/52, in Török Flóris utca (District XX), between Ferenc utca and Nagysándor József utca, 429 rail metres
- Along tramway line 51, in Gubacsi út (District IX), between Koppány utca and Földváry utca, 661 rail metres
- Along tramway line 51, in Mester utca (District IX), between Angyal utca and Dandár utca, 607 rail metres
- Along tramway line 51, in Gubacsi út (District IX), between Földváry utca and Hentes utca, 414 rail metres
- Along tramway line 17, in Bécsi út (District III), between Föld utca and Berényi utca, 1,493 rail metres

With the implementation of the project, traffic safety increased, and tramway and automobile traffic became faster.

Track reconstructions adjusted to the track closures of BKK Zrt.'s big projects

- On the tram line 3, used by the CAF trams on Ecseri út, between Üllői út – Egresdő utca, the rail connection providing for the turning of the trams and the connected rail was replaced in 234 rail metres length. The work's section border was connected to the track construction implemented from by BKK Zrt. from EU funds.
- On the tram lines 3/62, level crossings were completed in District XIV, at Nagy Lajos király útja – Mogyoródi út and Nagy Lajos király útja – Egressy út. The construction of these two level crossings were key to provide for the running conditions for the CAF trams. These level crossings let through a high road traffic, therefore their renovation not only improved the quality of the tram rails, but also participant of the traffic can pass rails more comfortably than earlier.
- The replacement of the run-down turnout and junction on the tram lines 3/51/52, within the rail complex in the XXth District, in the crossing of Határ út - Jókai Mór utca is completed, and as a result the operational safety of the tram transport improved also in this section.

Renovation on the line of the No. 14 tram

The technical condition of the rail connection at Frangepán utca is run-down, its geometry failed to comply with the current standard turnout geometry. During the renovation work, the currently used standard Vg48 100/100e type right hand side turnout was installed for the safety of transport, and also 162 rail metres rail was replaced. At the same time, the replacement of 376 m, 100 mm² diameter copper contact wire and three poles was also completed.

Renovation on the line of the No. 50 tram

On the No. 50 tram line, in the crossing of Üllői út - Ráday Gedeon utca, the level crossing/pedestrian crossing point was re-constructed. During the renovation, parallel with the construction of a pilot sleeper with an asphalt surface, fastenings better withstanding corrosion were also incorporated. In the section affected by this investment, the safe rail transport is restored, the life span of the track increased and the smooth operation of the upcoming CAF vehicles is ensured.

Rail replacements on metro line M3

The rail replacement on line M3 was completed by the autumn of 2015. The work was carried out by an external contractor and the Track Maintenance Plant of the Metro Operational Directorate jointly. In 2015 a total of 33594 rm rail has been completed (external contractor 24956 rm, own resources 8638 rm). The renovation works typically took place in weekend track obstructions and during the night time outage, as a result the speed restrictions due to the run-down tracks have been lifted. With these rail replacements we intended to ensure the safe operation of metro line M3 pending the complete renovation.

Renovation of tracks, contact wires, interlocking in suburban railway lines

On suburban railway line H5 (Szentendre), between Pomáz – Szentendre, a 252 rail metres track was reconstructed, and the replacement of 200 railway sleepers

and the repair of 2270 sleepers was completed. The 30 km/h speed limit at the replaced, renovated track section is lifted; traffic became quicker and safer.

On suburban railway line H6 (Ráckeve), between the stops Millenniumtelep – Dunaharaszti felső, on 3000 rail metres, partial renovation of rails, machine sieving of ballast, as well as repair of 1344 sleepers, plastic base plates and fishplates was completed.

In Soroksár, the reconstruction of level crossing at Beöthy utca, and in Tököl at Határ út, with full replacement of the superstructure, in continuous welded two-rail track, and the reconstruction of the Torontál utca stop, the continuous welded tracks near the platforms were reconstructed with the full replacement of superstructure.

On suburban railway line H6 (Ráckeve), in the framework of electricity supply works, complete replacement of the elements of the catenary wires in three locations. The replacement covered both the contact wire and its elements, and the support, tensioning and insulation elements integrated in the catenary wires. As a result of this investment, the safety of operation is increased in the affected sections.

Under the framework of the investment related to the further use permit for the suburban railway, checking and back-reporting of the Kén utca switch connection's electronic end position, establishing an operation setting dependency relationship was completed, based on the plans authorised by the National Transport Authority, with the view to maintain the appropriate traffic safety.

Telecommunication and interlocking

Metro line M3 – renovation of SEL 700 point drive gear

On metro line M3 we had 10 pieces of Lorenz SEL 700-H point drive gear renovated. In order to maintain the safety of train traffic, during this investment the point drive gear that passed the setting numbers guaranteed by the manufacturer will be able to perform a further 500,000 setting in a reliable manner.

Renovation of autostop equipment on the metro line M3

The autostop train halting equipment operate since the opening of metro line M3 in 1976. Continuous cyclical renovation to increase the lifetime of the autostop equipment is inevitable necessary to ensure the operation of the line. Under this project, the renovation of 10 autostop equipment will be completed in the section between Ferenciek tere - Deák tér.

Automatisation of point heating on tram lines

Under this investment, the automatisisation of point heating was implemented in several locations, which lead to increased life span of points, energy efficiency and availability. The safety of rail transport was restored for the winter operation; by preventing the icing and snowing in of points the risk of traffic disturbances decreased significantly.

Tram terminal station and line signalling equipment

State-of-art electronically controlled signalling and interlocking equipment were installed primarily during the large tram projects coordinated by BKK. At Mexikói út terminal station of line No. 3, at the Fehérvár út temporary terminal station of line No. 1, and the rails of the Ferencváros remise parking rails, at Széll Kálmán tér, at Török utca and Frankel Leó út, and at the merging section under Margit Bridge and the Buda tunnel of the Chain Bridge new equipment were set up, during the installation of which the workers from BKV undertook significant tasks. At Vörösvári – Bécsi út terminal station, the replacement of the equipment in the internal areas was not completed in the project, however, we had to find an appropriate and operationally safe solution for the reception of the increased vehicle traffic.

BKK Zrt. large project

The project „Interconnecting tram network in Buda” is completed, ensuring direct transport between Újbuda and Óbuda, without changing. In the Száva and Hungária remises, an investment and development combined with transformation was carried out, for the purposes of the maintenance and storage of the newly procured CAF trams. The Széll Kálmán tér branch of the project “Interconnecting tram network in Buda” included the establishment of the Buda North-South tram connection. This led to the connection of tram line No. 17 at Török utca, and Frankel Leó út into the Margit körút tram line. By this step, an interoperable tram track was constructed between Széll Kálmán tér and Óbuda, and the opportunity to travel from Vörösvári út to Albertfalva was created. Parallel with this, the renovation of tram line No. 17 was also completed and stops between Margit körút – Tímár utca are now accessible by wheelchair users. Connected to and supplementing the Széll Kálmán tér branch of the “Interconnecting tram network in Buda” project, a rail reconstruction with big track panels took place in Bécsi út, which did not affect the project directly, and a partial renovation of the signalling equipment was completed at the Vörösvári út terminal station. Furthermore, the renovation of the Farkastorok level crossing has to be highlighted.

With the Bem rakpart branch of this project, a new tram line section is established between Margit híd – Batthyány tér, connecting it with the current line No. 17. Thus the Buda North-South tram connection was established in this section; this new section directly connects Óbuda and Újbuda. At the wharf section, the tram line was constructed above the suburban railway tunnel, therefore the necessary strengthening and insulation of the ceiling also took place.

The last part of the project is the renovation of Széll Kálmán tér, that creates the opportunity to establish a new terminal station for the cogwheel railway at Széll Kálmán tér. It creates accessible connections into every direction; a new escalator and elevator will be constructed, furthermore tram stops will also be reconstructed.

The technical handover of the tram track already took place; 90.4% of the Széll Kálmán branch, 68.3% of the Bem rakpart branch was implemented with EU funding.

Infrastructure developments, completed projects

The continuous maintenance of the technical conditions of the infrastructural elements guaranteeing the running of the vehicles requires regular maintenance, due to the continuous use. It is important to note that these assets, such as the rail track and its superstructure, electricity supply, signalling and interlocking equipment, and all other infrastructure elements guarantee that the accident free transport can be maintained.

On 15 December 2015, the National Transport Authority issued the final (effective for an unlimited period of time) permission to use the main line of the Budapest metro line M2, and on 30 December 2015, for the tunnel and rail yard interlocking and automatic train control system in the main line of metro line M4 section I.

The revision of the signalling and operational instructions for public road railways, and the inclusion of the necessary amendments and additions took place.

After the renovation of tram line No. 1 (in order to comply with official requirements, and for the 16 January 2016 start of the “Interconnecting tram network in Buda” project) a significant number of tram drivers took part in vehicle type and line knowledge trainings and exams. To support the CAF type knowledge trainings, we commissioned a simulator aligned with the Budapest regulatory environment in the Száva remise.

Renovations implemented under the tram sector’s own competence in 2015:

- big track panel i.e. uniform renovation of tram lines No. 62/69, and No. 51/52.
- Track reconstruction of the Grand Boulevard with roadbed change
- Repair and renovation work on tram line 3/52, at the Ráday Gedeon utca level crossing of tram line No. 50, with the replacement of the overhead electricity line of tram line No. 41.
- Automatisations of point heatings.
- Road and tram track renovation in the entire Görgey út section in District IV, in the length of 2 km. Construction of three stops in side platform outline (replacement of big track panel rails in István út). Renovation of the contact wire network’s poles and cables.
- Structural works in the Buda bridgehead tunnel of the Chain Bridge, laying of towing earth cables, and rail renovation at the Pest bridgehead of the Chain Bridge.
- Rail replacement at Szent Gellért tér.
- Filling up the crater at Széchenyi rakpart on the tram line No. 2.
- In the Száva remise, a new serviceman stall with a roof platform was established. The vehicle wash equipment was renovated; the sand filling

system was transformed, and a new vehicle lifting equipment enabling the lifting of CAF vehicles was installed.

- In the Hungária remise, the repair hall “A” was transformed, with the establishment of rails with roof platforms and inspection pits, and a revolving crane was also installed. The rail network in hall “B” was also renovated.
- In the Angyalföld and Kelenföld remises, the outdoor lighting in the site was modernised, with the installation of LED light sources.
- The establishment of the single centre control of current transformers has started with the cut out of Zugló centre and the extension of the Vaskapu centre.

Renovations implemented under the metro sector's own competence in 2015:

by the autumn 2015, rail replacement on line M3 was completed. Parallel with this, on line M3 6 groups of turnouts, on M2 turnouts 5 groups of turnouts, and in the turnout district of the Millennium Underground's Mexikói út terminal station 8 groups of turnouts were replaced.

During the partial renovation of the stations at the Millennium Underground line, the metal structures at the entrances to the stations were renovated or replaced. Complete renovation and replacement of the ornaments on the stations' support poles was completed, and nearly 2,000 defective majolica tiles were replaced. In order to maintain the period state of the stations, benches and wooden structures were renovated.

Under the energy efficiency project the full replacement of the outdoor lights in the Kőér utca rail yard was completed. In numerous locations on the Millennium Underground line (in the passenger areas of Hősök tere, Bajza utca, Kodály Körönd, Vörösmarty utca, Oktogon, Opera, Bajcsy-Zsilinszky út and Vörösmarty tér stations) light sources were replaced, thus, in addition to better illumination, we achieved a significant energy saving.

In the utilisation of renewable energies it must be noted that a heat pump was installed in Nagyvárad tér, which serves both heating and partly cooling of the station.

In two escalators in the Keleti station, the repair of guide rails and the runners greatly improved the technical state of the stairs and decreased the noise effect significantly.

As a result of electricity supply overhauls in the Kőér utca rail yard the switching of storage rails became fully reliable.

Electricity supply works

In order to increase the safety of electricity supply, replacements of contact wires and towing cables continued, as well as tasks aiming to reduce transmission losses.

In the Millennium Underground's contact wire network 781 metres contact wire were replaced. The replacement of a towing transformer went on in each of the Kvassay, Kavicsbánya and Dunaharaszti current transformers. In tram line No. 41, the replacement of the main cable is completed.

In the Pálffy current transformer, the partial replacement of the entire cable network was completed; 5,500 metres new cable was integrated in the network. In Bem József tér, by cutting and extending the existing earth cable network, the cable arrive at the suburban railway tunnel, via a new route. Thus the cables were lead on the side wall of the tunnel at a significant length. The energy supply for the suburban railway can again be ensured from the Pálffy engine house. The energy restrictions on the line sections is lifted.

- Transformation of 48 V DC dividers;
- Replacement of the storage battery in the Lehel tér and Árpád híd stops;
- In Ecseri út, the preparations for the overhaul of the UPS equipment;
- Cable installation tasks fitting the track obstructions at the Dózsa György út and Árpád híd stations;
- Repair of the 0.8 kV protections;
- At the “Déli pályaudvar” metro station, replacement of storage batteries, re-cabling works;
- Stadionok metro station: construction of remote controls to 5H and 7H section switches, parallel with the overhaul;
- On the Millennium Underground line, in the area of Bajza utca, Oktogon, Vörösmarty tér, Bajcsy-Zsilinszky út and Deák tér replacement of ~ 790 m contact wire, and in Mexikói út point line was constructed under this investment.

On lines M2 and M4 the projects affecting the track were completed, as well as other works that lead to renovations, replacements, and repairs throughout the entire railway network.

Thanks to the modernisations the level of energy consumption also decreased, and resulted in savings. As a result of developments implemented recently for the complex metro line M2, including vehicles, BKV Zrt achieved a 27% energy saving.

The suburban railway business line completed the tasks listed below in its own competence that prevented the deterioration of technical standards:

- In the Batthyány tér terminal station, repair of the frame tunnel's reinforced concrete structure and contact gaps, painting of side walls, replacement of suspended ceilings, construction of a drain for run-off.
- At the Tímár utca stop replacement of the superstructure, with the rehabilitation of substructures, water drainage, construction of a reinforced edge (with a safety of life fence), renovation of the stop's reinforced concrete retaining wall and a covered slope.

- At the Szentlélek tér stop, replacement of the superstructure, with the rehabilitation of substructures.

As a result of interventions affecting the track and completed by the suburban railway business line in its own competence, the restrictions on 18,701 rail metres were lifted or not introduced; the main tasks were as follows:

- Replacement of muddy embedment material (removal of water bags);
- Replacement of cross sleepers and turnout parts;
- Various manual settings;
- Rail replacement (own implementation);
- Repair and maintenance of level crossings;
- Reconstruction of rails (own implementation);
- Sleeper repair with the replacement of inserts.

Investments completed in 2015 on the suburban railway track resulted in lifting the speed restrictions on a total of 1,079 rail metres. On the Szentendre line (H5) partial rail renovation, on the Ráckeve line (H6) sieving of ballast, and rail replacement, as well as renovation of level crossing at Beöthy utca and Tököl Határ út meeting point.

With regard to the suburban railway electricity supply, the following tasks were completed in 2015, resulting in improved performance of the relevant infrastructure division:

- Complex diagnostic measurement of the contact wire network.
- Replacement of contact wire, catenary wire, contact wire support poles and steady arms on the lines.
- In the Ráckeve and Gödöllő lines, repair of the on a negative return system.
- Repair of the pole-footings on the Gödöllő, Csömör, Szentendre lines.
- Repair of tensioning weights at the Gödöllő, Szentendre lines.
- Aluminum main cable replacement on the Ráckeve line.
- Main cable replacement on the Gödöllő, Szentendre lines.
- At Cinkota and Békásmegyer stations overhaul of point heating cabinets.
- At the Margit Bridge stop, construction of the missing overhead section.
- Leading the Pálffy feeding cables on a new route.
- Replacement of DC and 20 KV circuit breakers in several current transformers.

- In the Kvassay, Kavicsbánya and Dunaharaszti current transformers, replacement of towing transformers.
- In the Csepel, Dunaharaszti and Cinkota rail yards, energy efficient transformation of the shaft and the indoor spaces.
- Establishment of the standard protection against electric shock hazard on the outdoor interlocking elements (Közvágóhíd, Tököl, Szentendre stations).
- Repair of the suburban railway radio link connections, modernisation of the base stations' radio units.
- Checking and back-reporting of the Kén utca point connection's electronic end positions, establishing an operation setting dependency relationship.

Other infrastructure renovation

As most significant infrastructure task, a rail grinder and a railborne rotating excavator was procured. The modernisation of the Cinkota suburban railway rail yard heating system is completed. In order to restore the operational safety of track maintenance, the renovation of 4 railway freight wagons (dosators) renovation, renovation of the shaft rails of Hungária remise, and several operation related investment arising during the year were completed.

Acquisition of a rail grinding machine

In BKV Zrt's track-based network, as a result of the intense traffic, the rail material is badly worn, irrespective of its fixing system. The rail profile can be restored and the running surface maintained by a rail grinding procedure; this can increase the life span of the rails significantly. The procured machine can be used on railway, metro and tram rails, suitable for moving in small radius circles and it is capable for self-propelled run at least at a speed of 40 km/h on roads, and at least at 20 km/h on rail. This grinding machine has instruments to measure wave tear and profile, a rail diagnostic equipment, evaluation software. By using the procured rail grinding machine the life span of rail and rail systems can be significantly increased. In addition to maintaining operational safety and continuous operation, travel comfort can also be ensured.

Acquisition of a second hand rail-borne rubber tyre rotating excavator

A Liebherr A 900C ZW type second hand rotating excavator was purchased. The length of the rail tracks with water bags, and muddy embedment is growing. This growth cannot be halted but only slowed down by continuous local manual replacement of the embedment. The prevention of the further deterioration of the railway track and the introduction of the 'slow' signals, the gradual lifting of the 'slow' signals arising from the muddy embedment can be solved by the motorisation of the local embedment replacement.

Investments required for the operation and completed during the year:

- Reconstruction of the waste water processing plant in the KŐÉR utca rail yard.
- Replacement of the Grand boulevard tram - trolleybus contact wire crossing
- Integration of a water draining at Oktogon
- On the H6 (Ráckeve) suburban railway line, in the district of Tököl, replacement of 26 poles
- Renovation of a washing shaft in the Cinkota Bus depo
- Modernisation of the H6 (Ráckeve) suburban railway train describer system

Reconstruction of the heating system in the Cinkota suburban railway site

For environmental protection purposes, we carry out heating reconstruction, also using renewable energy, in the operational buildings of the Cinkota suburban railway site. The old and out-dated engineering, state-of-art heaters and supplementary equipment is installed. Sun collectors ensure the production of hot water. Based on the experience, via this heating reconstruction a 35 per cent saving can be achieved. According to estimates, the return period of this investment is six years.

Image improvement of suburban railway line sections and stations

At the Gödöllő “Szabadság tér” station and the Dunaharaszti external station, with the view to improve the image of passenger areas, we managed to establish a level crossing by replacing run-down elements carrying the risk of stumbling. At the Dunaharaszti station 216 metres of rail was replaced. The new pedestrian level crossing means, in addition to the more aesthetic design, safer transport also for the blind and partially sighted passengers.

Post-flood recovery works

The 2013 June floods on the Danube caused damage in several facilities of our Company: piers, underpasses, suburban railway- and tram tracks, electronic equipment, retaining walls. The damage was in the range of HUF 900 million. The reconstruction will be completed in Q1 2016, also supported by the disaster recovery service and the Metropolitan Municipality.

2015 results of the Railway Operation Directorate

As a result of the launch of metro line M4 in 2014, and the reconstructions in public transport, implemented in tram lines, the performance of the railway business line reached 10,981 million place-km*by 2015, and provided 65.6% of the Companies total performance with the operation of the following vehicle portfolio (as of 31 December 2015):

Tram vehicles		Suburban railway vehicles		Metro vehicles	
Type	quantity	Type	quantity	Type	quantity
CAF Urbos 5	25	MIX/A	14	AM4-M4	60
Combino	40	MX	32	AM5-M2	110
Industrial, articulated	78	MX/A	150	81-714	122
KCSV7	30	PXXV/A	7	81-714-2M	6
T5C5	198	PXXVIII	16	81-717	63
T5C5K	122	PXXVIII/A	75	81-717-2M	4
TW6000	93			EV3	66
TW6100	10			Millennium Underground	23
Cog-wheel Railway motor car	7				
Cog-wheel Railway passenger car	7				
Total	610		294		454

The passenger traffic in the currently operated 30 tram routes is served by 8 different types of trams, by 596 tram vehicle in total, while the passenger traffic in the cogwheel railway, popular amongst tourists is served by 7 vehicles. In the current 5 suburban railway routes three types of motor cars and the connected three types of trailers serve our passengers, with a total vehicle portfolio of 294 vehicles. On the Millennium Underground Railway line (i.e. metro line M1) 23 individually designed three-part articulated vehicles operate. On metro line M2 a total of 22 trainsets, built from three different makes of trains, 5-wagon ALSTOM metro trainsets; on metro line M3 261 Russian type EV3 and 81 line metro trainsets; while on metro line M4 15 trainsets, built from two different makes of trains, 4-wagon ALSTOM metro trainsets operate.

Based on the above it can be concluded that the vehicle portfolio of the railway business lines consists of very complex and variable types and makes. Our business lines operate COMBINO, CAF trams and ALSTOM metro vehicles that fully meet the requirement of our age, with high passenger comfort, with fully interconnected carriages, with low floor and air condition, as well as the more aged metro, tram, funicular, suburban railway and Millennium Underground vehicles providing much less comfort, but guaranteeing fully adequate safety levels.

The railway operation areas arrange the safe and continuous traffic operation by operating numerous infrastructure device, the most important of them are listed in the table below.

Description	Unit of Measurement	Tram+Cog-wheel Railway	Metro+Millennium Underground	Suburban railway
railway track (rail yard, lyra)	rrm	349,300	118,060	203,995
turnouts and rail junctions	quantity	871	270	390
bridges	quantity	46		64
retaining walls	m2	3,500		4,652
transformers	quantity	38	47	13
contact wire network	rm	640,000	12,470	162,003
towing cable network	rm	940,000	175,486	121,052
line lighting device	quantity	295 (location)	66,350	1,465
transmission networks	m	100,000	1,275	122,880
signalling equipment	quantity	155		152
interlockings	quantity	2	14	483

(Data based on the surveys at 31 December 2015)

Daily railway traffic runs, according to 31.12.2015 data, on totally 671.4 km track; the energy supply ensuring the vehicles operation is supported by 98 current transformers. The vehicles get the electricity required for their movement via 814 thousand rm long contact wire, and via 1,236 thousand rm long towing cable network. Of course safe operation is supported and guaranteed by, in addition to the above listed infrastructure elements, also by further elements (signalling equipment, line lighting device, engineering equipment, escalators, ventilation systems, etc.), the number of which is above several hundred thousand.

In the energy field, the re-regulation and operation under ISO 9001 of energy processes took place.

In last year BKV Zrt was awarded by the title of Energy Conscious Company, then it submitted a bid for the Energy Efficiency Excellence Tender, launched in the area of energy consciousness.

The accident record of the Company was not favourable in 2015; compared to the average of the previous three years the number of accidents at the company grew by 3%, amongst them those attributable to the company by 8%.

In the framework of preventive activities, the preparation of training aids is to be noted, as well as the a performance of Transport Correction Behaviour Influence Trainings for drivers, the transport safety competition organised 22 times in 2015, and in the context of damage administration, the cost efficient management of the summer storm damage.

The Railway Operation Directorate attaches primary importance, in addition to carrying out the basic tasks of vehicles and infrastructure assets, to perform major renovation, modernisation projects, investments.

2015 results of the Bus and Trolleybus

Operations Directorate

Continuing the dynamics of the fleet renewal started in recent years, BKV Zrt put into traffic numerous new and second hand purchased vehicles in 2015. Maintenance and extension of these processes, subject to the resources available at all times, is indispensable for the sector to meet the challenges posed by the active competitive market characterised by the new bus operation model introduced by Decision No. 2255/2011.(VIII.31.) of 11 August 2011 by the General Assembly of Budapest.

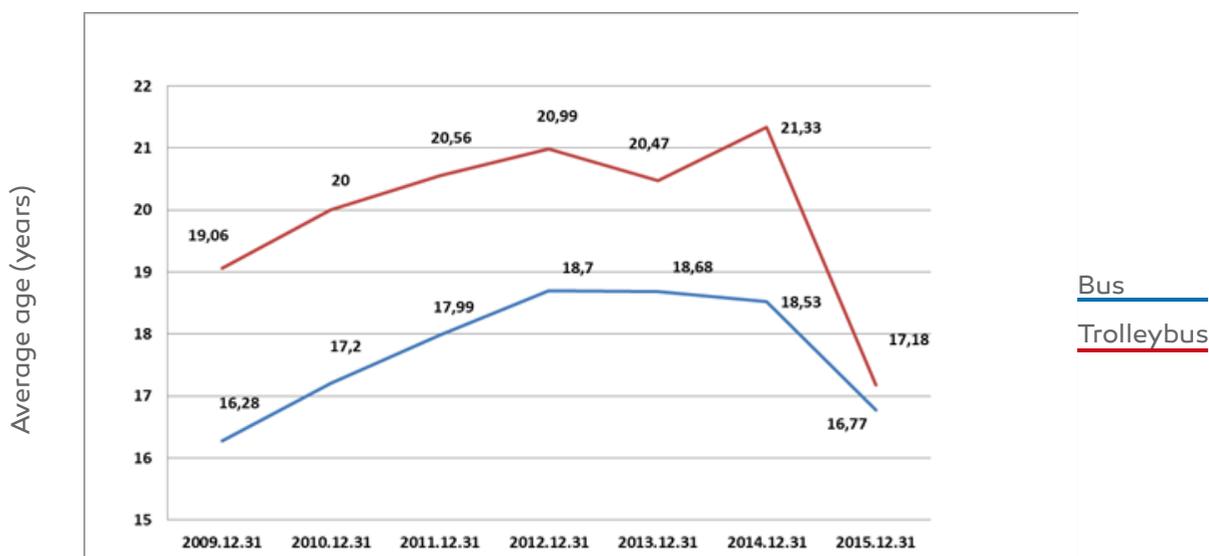
As a result of the conception of this new model, in the period between May 2013 and December 2015, we transferred nearly 400 autobus equivalent performance to the competitor operators (VT-Arriva Kft., VOLÁNBUSZ Zrt., T&J Buszproject Kft.). To halt and turn back this negative trend, we extended our fleet by nearly two hundred vehicles, complying with the up-to-date emission standards, with low floor in the entire vehicle length; partly as a result of this we could regain an 80 vehicle equivalent service volume, parallel with the negative trends.

	Vehicle type	Quantity
Busz	IKARUS 127V / MODULO M108D	16
	KARSAN ATAK	16
	MERCEDES-BENZ CONECTO	15
	MERCEDES-BENZ O530 CITARO	23
	VAN HOOL NEW A330 CNG	13
	VAN HOOL NEW AG300	25
	VOLVO 7000	24
	<i>Total</i>	<i>132</i>
Trolleybus	SKODA-SOLARIS TROLLINO 12	20
	SKODA-SOLARIS TROLLINO 18	16
	<i>Total</i>	<i>36</i>
Grand total	168	

Second hand and newly purchase buses and trolleybuses that entered service in 2015

The vehicles that entered service replaced obsolete IKARUS vehicles, ready for scrapping with high floors, by significantly improving service quality offered by Bus and Trolleybus Operations Directorate (hereinafter Bus Directorate), and the operational indicators of the fleet also improved.

Average age of the bus and trolleybus fleet (2009–2015)



The 2015 performance of Bus Directorate in the bus business line (including subcontracting) was 61,058 thousand useful vehicle-km and 5,209,365 thousand place-km, that of the trolleybus business line was 5.629 thousand useful vehicle-km and 540,287 thousand place-km. Compared to the reviewed plan figures in the Business Plan, the actual performance figures were met, with regard to useful carriage km, in 100.2% for the bus business line, and 97.1% for the trolleybus business line.

The decrease in the Company's bus performance continued in 2015. Based on the current tenders, T&J Buszproject Kft entered into service 25 hybrid articulated VOLVO bus; VT-Arriva Kft. 75 standard MAN buses and 75 articulated MB Conecto bus in several phases, leading to a 1.9 million, and 10.35 million useful vehicle-km decrease in BKV Zrt's performance.

In addition to this, tenders aiming to renew contracts that expired in 2015, as a result of which, tasks for 30, then further 25+25 vehicles went back to the internal service provider BKV Zrt. For the separate recording and settlement for this latter service (25+25), Supplement 1 to the Public Service Agreement was concluded.

Compared to the previous year, the place-kilometer performance decreased to a greater degree than the carriage/kilometre performance, since outsourcing affected articulated vehicles to a greater extent, and the proportion of midi vehicles grew by the returned performance.

The bus business line performance was increased by several additional tasks in 2015, on top of commitment undertaken in the Public Service Contract.

The train replacement activity performed based on the order from MÁV-Start Zrt meant a significant performance, primarily for the period of emergency works at the Déli railway station tunnel. The performance of train replacement tasks meant some 75 thousand useful vehicle km performance during the year.

The National Police Headquarter, under the measures taken in the context of the crisis caused by mass migration, ordered from BKV Zrt the transport of persons

subject to the Asylum Act by bus. This performance, over 217 thousand vehicle-kilometres and requiring a significant operative organisation, was performed by the Company without compromising public service activities.

The contract concluded with VOLÁNBUSZ Zrt in September 2006 and amended several times was terminated by BKV Zrt with the effect of 31 December 2015. Accordingly, as of 1 January 2016, VOLÁNBUSZ Zrt. is no longer a subcontractor for BKV Zrt; it will have no more subcontractor performance in the bus business line; lines 87-187 will be exclusively operated by Bus Directorate.

Refugee transport tasks

Special tasks in 2015 included the transport of migrants arriving at Hungary due to the long-term crisis in the Middle East, with the active participation BKV Zrt's Bus and Trolleybus Operations Directorate, jointly with public bodies. This extra public service activity occurred typically in three areas:

- Passenger transport between the Budapest transit zones (8 August 2015 – 16 September 2015). From 8 August 2015 until 16 September 2015, at a daily frequency, two IK 280 buses and four drivers were provided by BKV Zrt for the transport tasks between the appointed transit zones at the Budapest railway head stations, where the refugee transport typically meant permanent availability of buses.
- Extraordinary migrant transport between Budapest and Hegyeshalom (4 and 5 September 2015). The Central Operative Committee coordinating the work of public bodies and related bodies involved in the migrant management indicated its request for extraordinary transport to the operative contact person of BKV Zrt. Bus and Trolleybus Operation Directorate at 9:30 p.m. 4 September 2015. The operative refugee transport activity was performed by 71 buses (typically Ikarus 280 and Ikarus 435) and the equivalent number of drivers; in order to maintain service continuity, a service carriage was put into service, with two maintenance personnel.
- Refugee transport activity at the Southern border (7 September 2015 - 29 October 2015). As of 7 September 2015, BKV Zrt's bus business line, upon the order from the Central Operative Committee, performed further significant transport tasks at the Southern border between reception centres. As a result of this, our Company carried out the dynamically strengthening activities in the first two weeks on average with 30 buses, subject to a gradually increasing presence. In the later period (approximately during the next month), the transport capacity used decreased, however still 10 buses a day were needed to complete the tasks, until 29 October 2015. Involvement of buses in the transport of refugees caused no disturbance in the Budapest public transport. Transport tasks were carried out primarily with the technical spare portfolio (subject to outstanding availability indicators). Transport tasks between Budapest – Hegyeshalom took place on Friday to Saturday, thus the (lower) vehicle numbers provided for the Saturday timetable were put into service upon the start of the first service. Of course, buses used for refugee transport were let back to service by the Divisions of Bus Directorate only after a thorough cleaning (dry and wet technologies), which activities were carried out by an external consortia in service agreement relationship with BKV Zrt.

The Budapest bus transport is hundred years old

On 1 March, our Company celebrated the centenary at Hősök tere. In 1915, this day marked the launch of scheduled bus transport in Budapest. At this event, with István Tarlós Mayor of Budapest as patron, dr. Balázs Szeneczey Deputy Mayor and Tibor Bolla, CEO also held a speech. The ceremony was closed at noon by a very popular bus march. Anyone could get on the caravan of buses driving along Andrásy út. In the centenary year, colleagues and the public were offered by various events, amongst other open days presenting all bus premises.

Period vehicles

Bus Directorate keeps the renovation of its old vehicles, kept for their historic value, in order to maintain their periodic feature and capabilities to operate in period service. In 2015, the rubber wheel period fleet was extended by further unique vehicles, that could be viewed by the public, in addition to the centenary events of the Budapest bus transport, also during the MobilityWeek, in the Ikarus enthusiast week in Polgár. The renovation of Ikarus 284, Ikarus 521, and industry relic Tr5 was completed in the centenary year.

Vehicle tests

BKV Zrt, as key public service operator in the country, treats the early implementation of vehicle manufacturing innovation with high priority, the indispensable operational experience gained in this process provides an important basis for the fine tuning of the product and making it marketable.

During vehicle tests the following technical and economic criteria are implemented:

- operational experience,
- unit maintenance costs,
- fit into the current fleet of vehicles,
- passenger side comments,
- development routes and trends.

Modulo Medio Electric test bus

The Evopro Modulo Medio Electric type electronic bus was based in the Kelenföld Division site of the Bus and Trolleybus Operation Directorate; the batteries were also recharged there. The test run covered some three weeks, during which the vehicle served lines 16, 15, and 26 between 9 March 2015 and 29 March 2015.

The feature of the Modulo bus family that it offers airier passenger area and greater capacity than the conventional types, paired with quick change of passengers.

The propulsion of Modulo Medio Electric is taken care of by a 93% efficiency, US Hybrid EDU160 type induction electric engine, with 650 Nm torque and 80

kW rated output and 160 kW peak output it provides sufficient dynamic to the vehicle in all situations. As special feature of electric propulsion, the torque maintenance characteristics were welcomed by our drivers, also supported by acceleration tests.

The passengers welcomed the fact that our Company tested an electric propulsion green bus. Some noted that they are eager to get to know the hybrid bus manufactured in Hungary. Many expressed their satisfaction about the fact that the vehicle was developed and manufactured in Hungary. All in all, they found the interior design of the vehicle good, however it was noted that the seat opposite the back door should be a folding seat. The three seat lengthwise are narrow; based on passenger proposals it would be better to replace with an undivided bench.

Volvo 7700H type low-floor test midi bus

The vehicle was tested by the Company's Cinkota Bus Division between 1 May and 15 June 2015, in the city centre routes, similarly to the an electric midibus.

Hybrid buses are attractive primarily due to their assumed lower fuel consumption, since this means in theory a smaller burden for the operator. In our experience, however, the difference resulting from the consumption will not clearly support the advantage of hybrid vehicles if we consider the other necessary vehicle maintenance burden. The average fuel consumption of Mercedes-Benz Conecto buses, procured by the Company recently, was a total of 35.2 l/100 km in the period between 1 June 2015 and 31 July 2015 according to the "FORTE" (traffic) database, while the Volvo 7700H hybrid midibus tested by our Company in 2015 consumed 29.6 l/100km in the test period. However, in the latter case it must be taken into account that the test vehicle ran out of schedule, i.e. due to its lower load its actual consumption can be higher than the one registered during the test operation.

The vehicle has a parallel hybrid driving chain, consisting of a four cylinder 216 horse power diesel engine and a 161 horse power electric engine; the dynamic movement of the bus is ensured by a 12 gear robotised transmission shift. The RÁBA undercarriage, manufactured and developed in Hungary, is a special characteristic of the vehicle. Bus Directorate is committed to create the external costs of public transport, and thus a more viable urban environment, therefore we lease the vehicle from 2016, in order to collect the relevant experience on alternative driving chains.

MAN Lion's City GL CNG powered low-floor articulated test bus

The compressed natural gas powered vehicle was taken over by the Trolleybus Division of BKV Zrt from MAN Magyarország Kereskedelmi Kft for the one week test period (10-17 June 2015). The bus ran on the cross-town 7E route.

The bus's source of power is a six cylinder horizontally opposed CNG powered Otto engine (E2876LUH07 type) with an exhaust-gas turbocharger, with a maximum performance of 228 kW (310 hp), with 12.8 liter cylinder capacity and 1250 Nm peak torque, released between 1000 and 1700 rotational speed (depending on the gear). The torque converter is a ZF, 5+1 gear automatic gear box. In addition to the advantageous running dynamic characteristics and environment

friendly operation of the vehicle, a very clean cut, practical, and lighter than usual passenger compartment gained the appreciation of both passengers and drivers.

Research and development

From the envelope approved for R+D activities, in 2015 the plant measurement and testing of the research titled “Pilot operation of new rubber springs developed to increase protection against the turning of the tyre”. The plant testing of the rubber springs with new composition developed by Universitas Győr Kft took place. The old and new rubber springs were compared during the half year mileage (instrumental measurement while the vehicle is in motion) and after that mileage (laboratory spring characteristics and deformity measurements). The pilot was a success, the outcome of it was recorded in a protocol and a research paper.

Results:

- By now, it is in the public domain that our future greatly depends on the efficient use of our resources. Our Company joined the Virtual Power Plant Programme in 2014, aiming to collect, organise, quantify and publish the results achieved by the affiliated undertakings in the field of energy efficiency. In 2015 Tibor Bolla CEO could receive the award of ‘Energy Conscious Company’, since it is important for us to create a more viable environment.
- The Fővám tér and a Gellért tér metro stations of line M4 won the 1st prize in the public architecture category of ArchDaily’s „Building of the Year Awards” competition



M4 METRO

M4 metro

By the start of the passenger trials in 2014 the works on the M4 metro project are far from over, since during the test runs it had to be verified in numerous ways, subject to very strict official requirements and standards, the safety and predictable operation of the new line and its suitability from every aspect to get the final permit to use from the authorities, enabling the automatic driverless operation. Parallel with this, the construction works of the new two-level road junction in Budaörsi út, to facilitate and increase intermodality, and also the construction of parking lots connected to the Kelenföld terminal station of the new metro line, at a total of four locations.

SCHEDULE AND READINESS

The project's entire technical progress increased from 90% at the beginning of the year to 96% by the end of the year. The most significant change in the invoiced performance can be seen on the connected ground level investments (construction of P+R parking lots), in this case a 24% progress could be seen, but the interior construction contracts also showed a significant 8% performance, mainly with regard to the disputed issues closing the contract and the repair of deficiencies.

AUTHORISATION PROCEDURES

Linked to the construction of Móricz Zsigmond körtér station, the procedure for the permit to use the connecting rail for the tram line No. 61 was successfully completed, and the permit to use the unused rails of the Kelenföld railway station for the reconstruction works (transformation of railway track, trams contact wire) was also issued. The putting into service procedure of the so far completed three parking lots – two on the Etele tér side and one on Őrmező side – is also completed and all permits were obtained on time. The section of Somogyi utca serving the Etele tér – Somogyi utcai P+R parking lot is a private road, needed to be reclassified as public road in order to provide access to the P+R parking lot and to open it for the public; the relevant authorisation procedure is also successfully completed.

INTERIOR CONSTRUCTION WORKS

The interior construction, i.e. the establishment of wall surfaces, lighting and ornamental lighting, smokeless staircases, escalators, elevators, station furniture, floor surfacing, station water mist fire extinguishers, water supply and main ventilation systems, and the installation of the balustrades for the passenger information system was completed back in 2014 in the entire line. In 2015, the interior construction company carried out only the required repairs under the guarantee in the individual locations.

SYSTEMS, ELECTRICITY SUPPLY, CARRIAGES

After the contractors', principal's and official dark operation tests, the testing of system availability continued in the framework of passenger tests, and the verification and evaluation of parameters expected in connection with the level of automation. During this test run, the 99.96% system availability had to be also demonstrated. The most important task in connection with the successful closure of the project is to obtain the final permit to use, to this compliance with the official decisions and certificates issued by the certifier and the repair of deficiencies

detected during the handover procedure was necessary. The application for the final permit to use was submitted to the National Transport Authority in 2015. In the final phase of the test operation, tests were carried out in three steps, upon the request from the authorities, to demonstrate the capability of the fully automatic operation, without a supervisor, i.e. the daily traffic operated basically without the presence of a vehicle supervisor. Finally, the tests were completed with a positive result; it was demonstrated that the system is suitable for driverless operation and the final permit to use was issued on 31 December 2015.

CONNECTED INVESTMENTS

As part of providing for 1,500 P+R parking lots, as committed in the project's grant agreement, in the vicinity of the Kelenföld station three accessible parking lots were opened for the drivers in 2015, two on the Etele tér side and one on the Órmező side, with a total of 953 parking spaces and 70 bicycle stands. In the area of the fourth (last) parking lot to be constructed in the location of the Kelenföld railway station's eight unused MÁV rails, the demolition and transformation works on the MÁV Rails were completed and the technical handover procedure could be started still in December 2015, and after an open public procurement procedure, the preparation of the contract for the construction of a parking lot at the location of the demolished rails. The construction works on the Budaörsi út new, two-level road junction progress according to the schedule; by the end of the year its readiness will reach 78%. In the junction there are two turning artefacts, an accessible pedestrian and a cyclist underpass, and several crossing with a traffic lights, leading to significant improvement in the traffic in the area. The function extension works for the Fehérvári út operational purpose tram give way rail were also completed in 2015; the technical handover procedure was completed in November.

BUDGET

The total budget of this investment, 452.5 billion HUF, including the maximum calculated amount of the contractors' claims in 67.5 billion HUF, has not changed in 2015. The technical performance accepted and invoiced by the end of the year was 364.4 billion HUF.

SUPPORT FROM THE EUROPEAN UNION

From the new grant agreement concluded for the entire project in 2012, the construction of Budaörsi út junction and the P+R parking lots were taken out, both in terms of technical content and funding sources; the decision by the European Commission was amended in early December 2015. During the sectioning, after the revision of the budget and the removal of two phased project parts, the new budget amount of the large project is 437.9 billion HUF, broken according to the subsidy, of which the planned eligible expenditure from KÖZOP (Transport Operational Program) funding is 223.3 billion HUF. The budget of the junction construction and the subsidy (combined KÖZOP and IKOP /Intelligent Transport Operational Program) is 10.3 billion HUF; that of the four P+R parking lots as stand-alone small projects is 4.3 billion forint. The parties signed Amendment No. 3 to the grant agreement, as well as the KÖZOP grant agreements for the two phased small projects in December 2015. By the end of the year, 361.5 billion HUF was disbursed to the entire project, of which the amount paid for the two small projects was 10 billion HUF. The two IKOP bids were submitted to the Ministry for National Economy also in December 2015, the contract conclusion is due in the first half of 2016.



Az írás feltalálója
újbudaire jár!

2035



1

Etele út / Fehérvári út

TRAINING

Training

The earmarked envelope for external and in-house trainings is 370,3 million forint; of which we used 267,4 million HUF.

Externally organised trainings:

The external organisation of trainings means participation in trainings, further trainings, courses, conferences organised by educational institutions, training providers, event organisers other than the company, on the basis of preliminary planning.

Altogether 4,446 people participated in external trainings, the cost of which was 120,168,238 HUF.

External trainings:

- Courses providing a professional qualification (trainings listed in the National Training List and other trainings), further training of professionals, 3,077 people, 73,603,278 HUF
- conferences, 848 people, 19,822,601 HUF
- targeted preparatory trainings, 446 people, 8,662,900 HUF
- trainings in secondary and tertiary education (subject to a student relation), 63 people, 15,193,269 HUF
- language training, 12 people, 2,886,190 million HUF

Trainings organised in-house:

The operation of the Company is subject to authorisation, and similarly, the great part of trainings for the employees involved in the operations are also provided for by legislation or official orders. A total of 1,407 people participated in in-house trainings, with the cost of 14,462,720 HUF.

Internal trainings:

- SAP and other IT trainings: 475 person,
- Railway profession tutor course, exams (from 2014): 17 people
- Basic and further training course for Driver Training Certificate (GKI): 655 people
- Corrective behavioural training: 141 people
- Data protection course: 109 people

Other trainings and related costs:

- Fee for the official exams of railway employees (5,595 people): 42,270,500 HUF
- Driving technique training with the participation of 674 people: 28,449,758 HUF
- Training material (3), preparation of tests, editing: 2,229,200 HUF

Vocational training:

- The Company is engaged in the organisation and performance of formal practical training. In 2015, the average student headcount from vocational training schools was 325 (different from the recorded average staff headcount). Items decreasing the payment obligations for Vocation training contribution: 240 million HUF.



COMPANY RELATIONS OFFICE

Company Relations Office

The values and traditions of our Company have not changed for a long time; one of their core features is the desire to provide higher service standards. In 2015 we kept working alongside this idea to inform and promote the core values of BKV Zrt, and in the meanwhile we sought to present the diversified value creation work performed by the Company day by day, for the benefit of the Capital and people getting around in the Capital. We presented our results, purchases and developments in various communication channels, and social and professional events, emphasising the service provider and operator nature of our company.

The first scheduled bus service started exactly 100 years ago in Budapest. In honour of this centenary, we remembered the past of the bus transport with diverse programmes and we also presented our current results. The patron of this series of events was István Tarlós, Mayor of Budapest.

The theme of the anniversary went along our events; in the 2015 centenary year we opened our bus sites one after the other to the public, thus we provided a special insight to the hidden everyday life of the bus operation. Our very popular open days attracted several thousand visitors.

Linked to the centenary, in a special exhibition in the Deák tér BKV Museum, we presented the typical vehicles types of the past hundred years, and illustrated the century old history of the Budapest bus transport with the help of contemporary photos. Also for the centennial, we organised an exhibition from the most creative drawings received for the drawing competition for primary school children with the title “The Budapest bus transport is 100 years old” in the Deák tér underground Railway Museum; and we held for the fifth time the transport history quiz of the BKV museums for 8th class pupils, with the 100 year old bus transport as main topic.

Our museums, the Szentendre Urban Public Transport Museum, which is the only nationwide collection of public transport relics, and the Deák tér Underground Railway Museum offered standing and temporary exhibitions to their visitors.

We did our best in 2015 to contribute to the conservation, distribution and presentation of cultural values, thus we were pleased to join quality events, such as the Summering of Museums, or the Day of Cultural Heritage, the Day of Tour Guides and the Night of Museums. In the framework of the Metro Art Exhibition, we displayed an art show in the carriages of metro lines M2, M3, and M4, displaying the life of Anne Frank, and Ödön Lechner, and also the exhibition remembering the Roma Holocaust was on display for two months, resulted from our cooperation with the Cultural Association of Hungarian Jews, the Romaverzum, and the Ethnographic Museum.

In 2015 we joined again the Day of the Hungarian Song event, and the Melody Tram was started again. We organised the BAM for the third time, i.e. an exhibition of the works of BKV employees, which could be viewed by our passengers unconventionally in two metro carriage of lines M2 and M4. We launched our special festive vehicles also in 2015, the Tram of Christmas Lights, which is a

feature of Budapest's Christmas view, and the Trolleybus of Lights that helped to collect donations for those in need, jointly with Santa's Factory and BKV, under the name of Santa's Trolleybus. Obviously, our employees also took their part in the collection of donations. This was the first year when the Santa's Bus joined these two, already traditional vehicles, the interior decoration of which was prepared by the colleagues in the Company Relations Office.

We took part in the Day without cars, in the context of the European Mobility Week, and the Transport Safety Day held in the Railway History Park, where we offered a colourful programme to our visitors in our tent.

In addition to presenting our values and traditions, we put emphasis on presenting the present and future of our company. We were happy to inform the public of our vehicle acquisitions and developments. We gave a detailed report on the extension of the Company bus fleet by Mercedes-Benz Conecto type buses; the first Spanish manufactured CAF tram has arrived, and the second stage of the project has started, thus we could update our vehicle portfolio with buses assembled in our competence. Furthermore we tested Evopro Holding Zrt's e-Modulo, and MAN's Lion's City articulated CNG-powered buses. The rail replacement started in 2015 on M3 went on, and we reported on the main phases of this work.

In March, at the Prize Ceremony of the Energy Efficiency Excellence Tender Tibor Bolla, the CEO of BKV received the title of Energy Conscious Company, that gave a grate opportunity to emphasise the Company's commitment to environmental consciousness. In this context, in the Professional Forum organised in September, the Company presented its results achieved so far in energy saving, and energy efficiency, as well as further plans and ongoing projects. In this Forum we provided a presentation opportunity for businesses that contributed to BKV's energy savings results with their activity and pay special attention in their own operations to the issue of energy efficiency and the protection of the environment.

Continuing the tradition, in 2015 we organised the BKV Football Cup in the Előre Sport Complex, where teams of company employees, management and the operational, technical areas competed with each other.

The full administration related to the Lost and Found in Budapest public transport belongs to the competence of Company Relations Office. In 2015, Lost and Found received 12,035 items, 4,511 of them contained an ID. In addition to the items delivered, 1,973 items were found on the spot and their owners could take them over immediately.



TOURISM

Tourism

The Tourism Division of BKV Zrt is responsible for, amongst other, services that add a special feature to the transport of tourists in Budapest, wishing to travel to the Buda Castle, the János Hill Erzsébet viewpoint, between the Northern and Southern points of the Budapest section of the Danube, or to see the town from period vehicles. In order to provide the best service standards, we managed to implement some serious investments in 2015, and to launch a new and exciting service.

Chairlift tracks

At the Zugliget Chairlift we moved from the manual cash desk that operated without change for decades to the ticket sales via ticket machines, printing on the spot on thermal paper, and for the sake of the quicker turnover of passengers student assist in ticket purchase in busier period, weekends and public holidays (from March until November). This new system provides more accurate passenger traffic data and contributes to the later electronic ticketing.

At the Buda Castle Funicular, modernisation consists of the retaining walls, bridges renovated in 2014, carriages redecorated in 2015, and the full renovation of the drains that often flooded the basement rooms. In the coming years the focus will be on the improvement of passenger service.

We doubled the number of the ticket sales cooperation agreements on the Buda Castle Funicular and extended it with a new reseller (in addition to the hop-on-hop-off companies, the Clark Picnic Cafe is now included), who use the Funicular ticket as addition to their own products. Number of tickets sold to partners: 2451, value of tickets: 4,376,800 HUF.

Similarly to recent years, we managed to increase the ticket revenue by 11% from the Buda Castle Funicular and the Zugliget Chair-lift, with unchanged ticket prices in 2015, despite the lower passenger numbers (due to frost damage, there was no service in January), compared to the previous year's turnover (gross revenue: 1,091,914,220 HUF).

Special services and period traffic

The six special service buses that also go abroad overperformed the expectations in 2015, the revenue grew by 17%. Systematic work in the recent years brought various results: on the one hand we strengthened the customer base, we specialised nearly exclusively to a single customer (MB Travel Service Kft.), thus ensuring standard quality, and on the other hand cost rationalisation required economy of scale planning, therefore we decided to decrease the operated fleet by one-third in 2016.

An another specific niche of special services consist of the activity carried out with operational and period vehicles that were very popular in last year. Period services run according to schedule on weekends, ordered by BKK Zrt.

The period fleet is increasing continuously. MÁVAG TR5 and IK55 buses, IK 260T, IK 280T trolley buses were renovated, and tram No. 418 was also redecorated, and served for a film shooting, then went back to the museum relics in Szentendre.

In addition to the refugee transport performed by the company, the train replacement bus services were at record heights (due to the Kelenföld reconstruction, the km performance and the net revenue was nearly 30 times of the previous year's one).

BKV Zrt launched a new service in the City park, the so-called Little Sightseeing Tour, which was started as a pilot project by using the vehicle known earlier from Margitsziget. This rubber tyre three carriage renovated slow vehicle proved right the expectations, therefore two other such vehicles will be renovated in 2016. The red micro vehicles can be used by people wishing to get around in the Park from spring to autumn (weekends and public holidays). The ticket prices are positioned in line with the nearly half an hour journey, between one and two bus ticket price (50 % discount for children).

Boat traffic on the Danube

The passenger numbers on boat services No. D11, D12, D13 and ferry service No. D14 ordered in the Public Service Contract were growing.

The Company was actively involved in the direct transport of visitors to the Sziget Festival on the Danube.

During the year special services or increased service frequency served a few special crossing needs;

e.g. from 8 June 2015 until 26 August, every Friday, 80-100 children with adults were shipped between the Castle Garden Bazaar and Kossuth tér under the Erzsébet programme, or primary school kids from Veszprém between the islands, and a round trip for disabled children.

Our two closed river buses (Lágymányos and Budavár) already have an upper deck, and operate in the 2016 summer schedule with a new superstructure and eco-friendly engines, meeting the old request from our passengers. The process of engine replacement that started three years ago is ending now, only one out of seven ships in service has a propulsion system that fails to comply with the strictest EU standards.

The FUTÁR system was installed in 2015 on our seven ships involved in public transport, thus completing the passenger and fleet management information system of the fleet operated by BKV.



MANAGEMENT OF BKV ZRT IN 2015

Management of BKV Zrt in 2015

In 2015 BKV Zrt realised 151,665 million HUF operational level revenue (net sales revenue, other revenues), which is 10,130 million HUF higher than in 2014. This increase was primarily caused by the higher service fee values.

As of 1 May 2012, BKV Zrt has been operated under a Public Service Contract concluded with BKK Zrt. Under this contract, BKK Zrt uses the performance provided by BKV Zrt as internal service provider, and pays compensation for the justified costs not covered by the revenues. Fare revenues, price supplement, the revenues from the conurbation and district public transport, revenues from the parameter book contracted services, the operational subsidies from the capital and the state, the state normative subsidies constitute the revenues of BKK Zrt. The signed contract includes the compensation methodology the calculation of the monthly service fees payable is based on, the ordered performance, the terms for performance, planning and reporting requirements, bonus/malus system, items subject to penalty.

Significant part of the contractual and other services come from the Buda Castle Funicular and the Chair-lift, for the promotion of which the BKV Zrt is engaged in intense marketing activity. Thanks' to the Company efforts and the good weather, the revenue from the funicular increased by nearly 82 million HUF compared to the basis year, and the revenue from the chair-lift was less then in the previous years only due to the service lifting on the ground of technical failure. In 2015, revenues related to the closure of the Déli railway station and the significant volume of refugee transport appeared as one off items.

The revenues from other activities shows a 1,374 million HUF decrease compared to the basis, however, it is close to the planned level. The main reason for deviation from the basis was the revenue from the test run of tram lines 1-3, which incurred in 2014.

The operational expenditure increased by 6,432 million HUF compared to the previous year, meaning a 4.5% increase. In addition to the increasing material type expenditure, the amortisation policy also contributed to the increase of the operational expenditure. A 2081 million HUF saving is achieved compared to the plan for material and personal expenditure amounts, accounting for 77% of the operational expenditure.

The cost of utilised materials was increased by the launch of the Combino tram overhaul, the run-up of the PKD programme, and the materials used in the rail replacement of Metro line M3. On the operational diesel item there was a significant fall, thanks to the appearance of external service providers, and the drop of the world market price of diesel. In 2015, the unit price of the diesel consumed by BKV Zrt fell back by nearly 14%. Within the operation diesel, the use of compressed natural gas increased strongly, thanks to putting new CNG-powered buses into service, and as a consequence, the share of the CNG-powered buses performance in the total bus performance increased from 1.6% in 2014 to 5.4% in 2015.

The use of the services used remained within the planned value, but it was above the basis values. This increase in the expenditure can be traced back to the tram overhaul, the increase in the maintenance costs of Alstom metros, and the number of other vehicle repairs (e.g.: suburban railway passenger area reconstruction, bus chassis repairs).

The personal costs were 1.9% below the basis, and 0.8% below the 2015 plan. The personal expenditure were 473 million HUF lower than planned, primarily thanks to the saving achieved on the contributions payable for salaries. On the salary cost line, the saving resulted from the closure of the M4 metro project at the DBR project directorate, and for the M3 project, as a result of the later start of the operation.

The other expenditure were around the planned level, underperformance was caused by the lower than expected level of damage incidents and fines. In 2015, this increase compared to the basis was a result of the increase in the provision, the level of which exceeded the decrease of scrapping.

The Company's operational profit/loss was in 2015 a profit of 5,863 million HUF, which is 2,791 million HUF higher than the basis period's value. The positive result exceeding the basis period also means that the favourable trend of recent years i.e. the movement of the operational profit into positive continued.

The profit from financial transactions is much better than in the earlier years. Payable interests decreased significantly, by 1,764 million HUF, justified by the loan takeover by the State, as a result of which no interest payment took place in the second half of 2015.

The revised 2015 Business Plan already counted with the effects of the debt taken over by the State and the interest payment obligation for Q2. In the period considered thus the Company realised a total of 53,673 million HUF extraordinary revenue, consisting of the debt of 52,837 million HUF taken over by the Hungarian State, the de-recognition of 835 million HUF EU grant for the FUTÁR Project and 1 million HUF extraordinary revenue from other sources.

The profit before tax was positive, 55,517 million HUF, as a result of debt consolidation. Without the debt consolidation, the Company's profit/loss for the year was 2,680 million HUF profit, which is 2,434 million HUF higher than the basis, and 2,325 million HUF higher than the planned figure.

The favourable result compared to the plan comes from the significant savings arising from the efficiency improvements undertaken by the Company in the reporting year, which typically affect the material type items.



MAIN CHANGES IN THE BALANCE SHEET ITEMS OF BKV ZRT

Main changes in the balance sheet items of BKV Zrt

Assets

The book value of intangible assets within the assets accounts for only a 0.02% share. Their stock decreased by 780 million HUF compared to the previous period; it can be explained by the complimentary transfer of the unfinished software from the FUTÁR project to BKK Zrt.

The value of tangible assets owned by our Company decreased by 11,026 million HUF (1.7%), of which a major item is the transfer of the FUTÁR project in the value of 2,394 million HUF; the amortisation of assets is higher than the value of investments completed during the business year. The significant decrease in the investment advances is justified by the settlement of investment advances related to metro line M4.

The closing stock of the Company's participation is 1,285.2 million HUF, 0.3 million HUF lower than the opening stock of this period. This change is caused by the 0.3 million HUF impairment recognised for BKV Panoráma Kft. In 2015 BKV VJSZ Kft closed the business year with a positive result.

Loans extended to employees for home purchase are recognised as other long-term loans extended. In accordance with the provisions of the Accounting Act, 60 million HUF was reclassified as other short term receivables, which is the amount of the repayments due in 2016.

The Company's inventory of materials as of 31 December 2014 was 4,233 million HUF, and 5,362 million HUF as of 31 December 2015. This significant increase in the inventory of materials can be attributed to the storing in of the spare parts related to the M4 project and the M2 vehicle acquisitions.

The closing stock of the receivables from affiliated undertakings is 9,116 million HUF higher than the opening stock for the period.

The closing stock of the Company's cash account is 12,097 million HUF, of which 3,801 million HUF is deposited to a separate account for the funding of the M4 metro.

In 2015, BKV Zrt set aside a 390 million HUF revenue and 190 million HUF expenditure.

Liabilities

In the reporting period, the Company's equity grew by 56,006 million HUF, the equity/subscribed capital ratio is 150%.

In 2015, our Company set aside 151 million HUF provisions for litigation. From this provision, 471 million HUF was used, thus it decreased by 320 million HUF, compared to the previous year. The closing stock of the reporting period is 2,404 million HUF.

The closing stock of the Company's payables is 69,060 million HUF; 67,628 million HUF less compared to the previous period. The Company has no liabilities over five years.

The opening loan portfolio of BKV Zrt was 51,791 million HUF, of which 18,600 million HUF revolving loan, and 1 million HUF short-term loan related to the M4 project. As a result of the loan takeover by the State, the Company has no loans at the end of 2015.

Payables to affiliated undertakings decreased significantly; this can be explained by the correcting invoices issued to BKK Zrt in December 2014 with negative amounts, therefore the -2005 million HUF negative balance of trade receivables towards BKK Zrt is reclassified as liability.

BKV Zrt set aside a 216 million HUF revenue and 1,024 million HUF expenditure.

Cash flow

The closing stock of cash increased by 5,247 million HUF compared to the previous year, due to the significant improvement of BKV Zrt's liquidity position. The operational cash flow amount is 13,194 million HUF, the investment activity's cash flow is - 38,419 million HUF and the cash flow from financial operations is 30,472 million HUF.

BALANCE SHEET (Assets)

Million HUF

Serial number	Item name	31.12.2014	31.12.2015
A	Fixed assets	651,145	639,308
I	Intangible assets	935	155
1	Concessions, licences and similar rights	935	155
2	Intellectual products	0	0
II	Tangible assets	648,711	637,685
1	Land and buildings and rights to immovables	364,898	370,517
2	Plant and machinery	220,115	210,034
3	Other equipment, vehicles	2,548	1,799
4	Assets in course of construction	58,005	54,827
5	Advance payments for investments	3,145	508
III	Financial investments	1,499	1,468
1	Long-term participations in affiliated undertakings	1,267	1,267
2	Other long-term participations	19	19
3	Other long-term loans	213	182
B	Current assets	16,270	32,715
I	Inventories	4,331	5,807
1	Substances	4,233	5,362
2	Work in progress, intermediate and semi-finished products	41	34
3	Goods	57	411
II	Accounts receivable	5,089	14,811
1	Trade debtors	238	320
2	Receivables from affiliated undertakings	219	9,335
3	Receivables from independent undertakings	0	0
4	Other receivables	4,632	5,156
III	Securities	0	0
IV	Liquid assets	6,850	12,097
1	Cash, cheques	68	78
2	Bank deposits	6,782	12,019
C	Accrued income and deferred expenses	7,768	580
1	Accrued revenue	7,536	390
2	Accrued expenses	232	190
TOTAL ASSETS		675,183	672,603

BALANCE SHEET (Liabilities)

Million HUF

Serial number	Item name	31.12.2014	31.12.2015
D	Equity	134,592	190,598
I	Subscribed capital	127,000	127,000
	of which: repurchased own share on face value	0	0
II	Subscribed capital unpaid (-)	0	0
III	Capital reserve	10,473	10,962
IV	Profit reserves	-3,127	-2,881
V	Tied-up reserves	0	0
VI	Reserve	0	0
VII	Profit/Loss for the year	246	55,517
E	Provisions	2,724	2,404
1	Provisions for forward liabilities	2,724	2,404
F	Liabilities	136,688	69,060
I	Subordinated liabilities	0	0
II	Long-term liabilities	310	60
1	Investment and development loans	0	0
2	Other long-term loans	0	0
3	Other long-term liabilities	310	60
III	Short-term liabilities	136,378	69,000
1	Short-term loans	0	0
2	Short-term bank loans and bank overdrafts	51,791	0
3	Advance payments from customers	49	9
4	Accounts payable	69,491	52,441
5	Short-term liabilities to affiliated undertakings	3,071	1,146
6	Short-term liabilities to independent undertakings	343	504
7	Other short-term liabilities	11,633	14,900
G	Deferred income and accrued expenses	401,179	410,541
1	Accrued revenue	4,056	216
2	Accrued expenses	1,993	1,024
3	Deferred revenues	395,130	409,301
	TOTAL LIABILITIES	675,183	672,603

Profit and loss statement (with total cost method)

Serial number	Item name	2014	2015
1	Net domestic sales	128,377	135,317
2	Net export sales revenue	0	0
I	Net sales revenue	128,377	135,317
3	Changes in self-manufactured inventory	0	-7
4	Capitalised value of own performance	3,202	2,302
II	Own performance capitalised	3,202	2,295
III	Other revenues	13,158	16,348
	of which: reversed impairment	61	47
5	Material cost	34,591	34,611
6	Contracted services	19,323	20,326
7	Other services	1,224	1,196
8	: the purchase value of sold products	147	179
9	Services sold (including intermediated)	1,401	1,117
IV	Material type expenditures	56,686	57,429
10	Payroll	41,016	41,729
11	Payments to staff	2,934	3,063
12	Social insurance contribution	13,975	12,006
V	Staff (labour) costs	57,925	56,798
VI	Depreciation	26,280	32,152
VII	Other expenditure	774	1,718
	of which: impairment	197	87
	OPERATING (TRADING) PROFIT OR LOSS	3,072	5,863
13	Dividends receivable (due)	10	10
	of which: received from affiliated undertakings	0	0

14	Other interest and interest-type revenues receivable	12	22
	of which: received from affiliated undertakings	1	1
15	Other revenue from financial transactions	446	520
VIII	Revenues from financial transactions	468	552
16	Other interest and interest-type expenses (payable)	2,973	1,209
	of which: transferred to affiliated undertakings	0	0
17.	Losses on shares, securities, and bank deposits	-330	0
18.	Other expenses on financial transactions	565	505
IX	Expenditure on financial transactions	3,208	1,714
B	PROFIT/LOSS ON FINANCIAL TRANSACTIONS	-2,740	-1,162
C	PROFIT ON ORDINARY ACTIVITIES	332	4,701
X	Extraordinary revenues	211	53,673
ANNEX XI	Extraordinary expenditures	297	2,857
D	EXTRAORDINARY PROFIT/LOSS	-86	50,816
E	PROFIT/LOSS BEFORE TAX	246	55,517
XII.	Taxes payable	0	0
F	PROFIT/LOSS AFTER TAX	246	55,517
G	PROFIT/LOSS FOR THE YEAR	246	55,517

AVERAGE HEADCOUNT OF CORPORATE PERSONNEL

Definition	2014	2015	Index to base
1. Business managers	317	323	101,9%
2. Employees with university/ college diploma	360	374	103,9%
3. Other employees with higher and medium education	851	843	99,1%
4. Office business administration	135	135	100,0%
White collar total (F.1+2+3+4)	1 663	1 675	100,7%
5. Employees of service nature w/o assistant drivers	255	244	95,7%
6. Agriculture related	0	0	0,0%
7. Construction industry related	3 099	3 095	99,9%
8. Machinery operators in total	1 225	1 213	99,0%
9. Occupations w/o vocational training	317	343	108,2%
Blue collar w/o vehicle drivers and assistant drivers in total	4 896	4 895	99,9%
Full time employees in total (w/o vehicle drivers and assistant drivers)	6 559	6 570	100,2%
Vehicle drivers Tram	867	843	97,2%
Trolleybus	302	308	102,0%
Bus	2 503	2 402	96,0%
HÉV	130	133	102,3%
M1 (Mill. Underground)	68	65	95,6%
Metro	317	307	96,8%
Vehicle drivers in public transport in total:	4 187	4 058	96,9%
Metro assistant drivers	14	8	57,1%
Vehicle drivers and assistant drivers in public transport in total	4 201	4 066	96,8%
Blue collar in total (F 5+6+7+8+9)	9 097	8 961	98,5%
FULL TIME EMPLOYEES IN TOTAL	10 760	10 636	98,8%



