## 

Special events newsletter No. 4/2023

VIT

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## Dear Visitor,

fter four years we finally have the opportunity to meet again at this special event that is the largest transport and logistics fair in Munich. At SŽ – VIT, we are thrilled to be able to see you after a long while and talk in person about optimal maintenance solutions for your rolling stock that our shops deliver in Slovenia.

Despite the challenges faced with during the pandemic, we brought a number of new projects to completion, modernised our capacities and learned new skills. Our progress during that trying time is detailed in the latest issue of VITal News, along with a summary of the certificates we hold as testament to our commitment to quality and reliability.

Thank you for coming to see us. We make sure our solutions are a perfect fit to your requirements, which helps us form strong and reliable new partnerships. Let us develop the next successful project together.

Enjoy your time at the fair.



Dušan Žičkar Director



## Foreign market revenue up 42.1%

SŽ – VIT closed the 2022 financial year with a profit. After a few years of declining revenues because of COVID-19 pandemic, our revenues in 2022 increased to over EUR 120 million once the pandemic started to calm down and business conditions became more favourable. The revenues generated through maintenance services delivered on the international market stand out in particular.

n 2022, SŽ – VIT's operating revenues totalled EUR 123.81 million, whereas its operating expenses amounted to EUR 121.51 million. The company generated an EBIT of EUR 2.29 million, with profit before taxes standing at EUR 1.83 million. Our two largest customers - SŽ-Tovorni promet and SŽ-Potniški promet – were delivered the expected levels of rolling stock availability along and traction and technical wagon services throughout the year. An important development which had impacted on our business and will continue to do so in the future is the integration of a strategic partner into Slovenske železnice by acquiring a stake in SŽ-Tovorni promet. Other important customers in Slovenske železnice group include SŽ-Infrastruktura and SŽ-Železniško gradbeno podjetje Ljubljana, which typically require maintenance of rail vehicles. The revenue generated from services sold within

the Slovenske železnice group amounted to EUR 106.96 million, which accounts for 86.4% of the total revenue.

Our maintenance activities generated net sales of EUR 56.56 million, of which EUR 13.37 million was generated in international markets. Following our entry on the European market, we achieved our highest revenues in international markets last year, with a year-on-year increase of 42.1%. Sales in international markets account for 23.6% of sales revenue in the rolling stock maintenance segment, or 11% of sales revenue for the company as a whole. Wheelset processing remains the chief service delivered to international customers, with west Europe as the key market. Supplying maintenance of freight wagons and electric locomotives is also gaining ground on international market, however.

Providing fleet maintenance to Slovenske železnice and other customers requires continuous improvement and regular modernisation of maintenance facilities, as well as appropriate working conditions. In 2022, we invested EUR 2.91 million in equipment upgrades, of which EUR 1.76 million was used to construct new and renovate existing facilities and EUR 933 thousand spent to purchase production equipment. The investment was largely focused on the construction and renovation of facilities and the acquisition of production equipment, which included completing the project to build a new freight wagon maintenance hall in Koper, a purchase of new equipment for rolling stock maintenance, renovation of maintenance halls and staff facilities to improve energy efficiency and reduce environmental impact.

VIT is successfully marketing its services internationally while also fulfilling its main task of delivering maintenance services to the parent company. We have been acquiring new customers for more than 15 years and have built a number of long-term partnerships to date. With every quality audit of our services and with every new project gained, our presence on the European market for rail vehicle maintenance continues to grow. The trust of our customers and fulfilling our potential as a major maintenance provider at the crossroads of Corridor V and Corridor X paint a bright future for our business.

# ECM-certified workshops for every type of rolling stock

SŽ – VIT has maintenance workshops on all major transport routes in Slovenia and is one of the first businesses in Europe to have obtained, in 2012, an ECM certificate according to Commission Implementing Regulation EU 445/2011.

o meet the requirements for certification as stated in the ECM regulation, we started by becoming certified for carrying out the maintenance function for



The audit team audited the requirements and criteria of the maintenance function according to Annex II of the regulation with a focus on the management of maintenance activities which affect safety-critical components, which must be defined, as per Regulation 2019/799, in the technical vehicle documents of the manufacturer, with Directive (EU) 2016/797 serving as the basis for document management.

The audit has demonstrated significant progress in our perception of the importance to be compliant with the criteria, especially when it comes to safety, in turn helping us recognise risks more easily during operational work processes.

ECM certification is recognised across Europe and serves to demonstrate that we offer effective support to our clients in the delivery of the maintenance function for any type of rail vehicle – from freight wagons to electrical locomotives. Annual surveillance audits demonstrate our efforts to stay up to date with current maintenance trends and show our commitment to service quality and reliability our customers can rely on.

freight wagons, then, once Commission Regulation EU 2019/779 came into force, extended the certificate to all other vehicles, which are serviced in five workshops and at five worksites. To support the certificate validity, annual surveillance and re-certification audits are carried out by the Swiss certification body Sconrail, which examines whether the maintenance function is in conformity with the relevant documents and how the applicable rules are followed. It also conducts on-site inspections of the workshops where tractive and trailing stock is maintained. The next audit is coming up in May 2023.

A surveillance audit was held in late May 2022 to renew our ECM certificate according to Commission Implementing Regulation 2019/779. The certificate validity was successfully extended to 2025, demonstrating that we satisfy the formal criteria required for a continuous work process. Completing the assessment of our maintenance's conformity with theoretical and practical criteria under Annex II of Commission Implementing Regulation 2019/779 gave us the opportunity to expand our vehicle maintenance services and enter new European markets.



## New equipment, new skills, new services

Our wheelset maintenance workshop in Ptuj now has better equipment and new skills to supply services often in demand on the market. We set up an entirely new shed for drive unit maintenance on electric locomotives and upgraded our certificate for new wheelset assembly.

Shrink-fitting of tyred wheels, which was introduced as early as 2019, is now a part of our regular offer. We have a special maintenance crew along with a dedicated facility and implemented a new work procedure for joining wheels to the axle via heating.

he decision to introduce this service was made so that we could provide complete maintenance of ES64U4 Eurosprinter locomotives. An integral stage in EuroSprinter servicing is driving wheel unit overhaul. We previously had this work outsourced, but we knew that we had the technical capability to perform it in-house, so we decided to look at the options to get the service up and going at our own shop. Over the past years our workshops have been primarily in charge of Slovenske železnice's fleet, and we work hard to recognise an opportunity to go the extra mile for vehicle owners by making changes and improvements to our services. This minimizes downtime and cuts maintenance costs while allowing us to grow as a team and keep up to date with technology advancements. Moreover, new services open up opportunities on international markets, where demand is on the rise every year. By upgrading our equipment and optimising the replacement procedure, we aim to supply the service on international markets also for other locomotive types, such as Siemens Vectron.

While monobloc replacement has been a routine at our shop in Ptuj, this only applies to units other than the ES64U4. In comparison, wheelsets fitted to EuroSprinter locomotives are far more complex because of the gear unit and require post-overhaul testing of the driving wheel unit on a test bench, which has been purchased recently along with other specialized tools specifically for this purpose.

We intend to continue the training and equipment upgrading until the Ptuj shop will be able to overhaul the



complete drive unit along with all components.

Following market demand, we also made improvements to our TSI-compliant assembly of new wheelsets. After becoming certified for the assembly of BA 004 and BA 314 wheelsets in 2015 and BA 303 wheelsets in 2018, we passed in April 2021 the certification audit for the production of BA ULT 23 and BA ULT 25 wheelsets.

In 2022 we completed the call for tenders for the purchase of two new CNC turning machines for reprofling monoblocs and wheelset axles. The machines will boost our capacity and manufacturing efficiency and keep our production processes in line with technological advancement. The Computer Numerical Control (CNC) system delivers high precision and reproducability (quality) in wheelset machining. The new machines will also ensure better control of the machining process and reduce errors. The system automatically controls machining parameters such as material turning speed, cutting tool movements, cutting depth and other, making it ideal for reconditioning objects with axial symmetry and producing quality and identical parts. Operation of our CNC vertical carousel lathe and CNC horizontal lathe is expected to start in the second half of 2023.

Next to equipment upgrades and crew training, we renewed a number of our workshops, improved our energy consumption and adopted measures to reduce our impact on the environment.

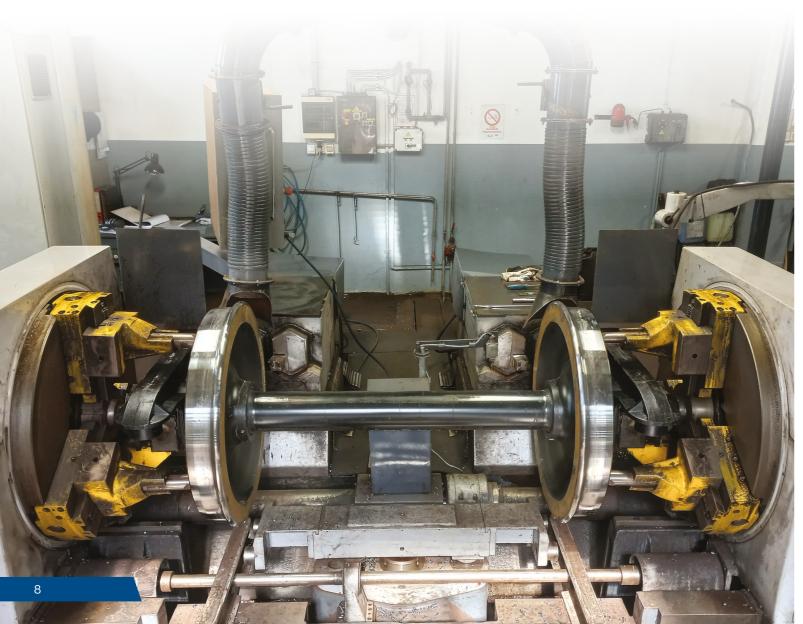
## Upgrades to the freight wagon maintenance centre in Dobova

Situated along Corridor X near the border with Croatia, Dobova is a small town with a big role in freight wagon maintenance. As our go-to depot for large-scale maintenance on freight wagons, the workshop in Dobova is VPI-certified and went through a number of upgrades in the past years. Certificates issued by reputable certification bodies demonstrate the importance we place on delivering quality services and meeting your expectations.

A number of important improvements have been achieved recently with respect to technology and environmental protection.

### Lathes

We have recently overhauled the Rafamet UBB 112/2 lathe for wheelset reprofiling. The lathe was fully dismantled and shipped to an overhaul supplier, which replaced or rebuild any worn-out components, cleaned the slideways, tested the functioning of every component, and reapplied a protective paint coat. In the meantime, we rebuilt the foundation of the lathe in Dobova. After the lathe was overhauled and the foundation rebuilt, we purchased a conveyor belt to automatically remove metal chips from under the lathe and discharge them at a container.



We also purchased another lathe for reprofiling wheelset journals and axles, which we installed next to the refurbished lathe. The lathe is a second-hand Potisje ADA PA-50/4000 unit, which was completely refurbished and upgraded with a custom Newall measuring system. Journal and axle machining is a new service at our shop in Dobova, so we also obtained the relevant VPI certificate for the service. With these lathes, we are able to deliver complete IS1 and IS2 wheelset overhauls.

### New brake tester

Recognising the growing demand for complete brake inspections on freight wagons, Dobova has acquired an additional automatic brake test unit. After some market research, we decided to purchase the Pdr 7 RailTab brake tester from DB Fahrzeuginstandhaltung GmbH Werk Fulda.

The Pdr 7 is used for automatic testing and recording of test results for braking systems. Once the vehicle is ready, the test sequence is fully automatic. The brake tester conforms to all relevant requirements, including the UIC guidelines 540 and 543-1 as well as VPI-EMG 07 and VPI-EMG 08. The brake tester is controlled by a RailTab tablet connected to the base unit via a wireless internet connection. When the unit was purchased, the brake testing team received training on how to operate the equipment, so they are able to operate the tester without assistance.

### Maintaining freight wagons with new

### modular integrated brakes

In mid-2018, SŽ-Tovorni promet acquired over a hundred new Sggrrs wagons from Innofreight, which were fitted with the latest CFCB braking system manufactured by Knorr-Bremse. This type of braking system was new for us, so our team of technicians in charge of brake maintenance took a training course in Budapest to learn the necessary skills and become certified for this kind of work. We also purchased new tools to offer regular maintenance for the brake system in question.

In our workshops, we are receiving more and more wagons with a new type of brake, also from Wabtec, which has developed its own version of the modular integrated brake, known as IBB. We have also received training on this type of braking system during our training in Skopje, and we are now familiar with braking systems from both manufacturers. We are prepared to take further training as required, and we are committed to continually improving our brake maintenance services to meet the evolving needs of this essential part of the vehicle.

### Environment and employee safety

The Dobova centre has renovated its paint chamber to comply with environmental standards and to keep up with the end-of-life of the equipment. The renovation included major maintenance work. The lower air ducts, which were filled with large amounts of waste material, were thoroughly cleaned. The Dobova centre has also replaced all lower and upper ceiling filters, cleaned and repainted the walls of the paint chamber, and protected the newly painted walls with a clear protective film. All the lights in the paint chamber have also been replaced. Measurements of air emissions from different outlets have also been conducted, and the filter system guarantees effective treatment, resulting in minimal particulate emissions to the environment. Our paint chamber ensures the optimal conditions for paint application in accordance with legislation and the requirements of the technology.

Another successfully implemented project was the procurement of safety equipment and protective gear for tank washing activities involving certain hazardous substances. This activity was previously outsourced, but due to the increased need for tank washing, we have purchased breathing equipment with a compressor to enable our staff to carry out the work safely.

To improve working conditions during winter and ensure more environmentally friendly heating practices, we have recently renovated our heating system by transitioning to an automated boiler house, which is one of the most advanced systems available in the market.

These upgrades add value to the maintenance of freight wagons in Dobova, but they are not the end of our modernisation efforts. To keep up with the needs of our customers, we need to continuously evolve and adapt. To maintain our reputation as a reliable maintenance partner, we strive to anticipate the needs of our customers and continuously update our facilities to align with the latest standards.



# New maintenance facility for rolling stock next to the port of Koper

In March we opened a new maintenance shop in the immediate vicinity of the port of Koper, allowing us to deliver inspections and minor repairs to tractive and trailing stock in transit through the port. Set up on the Koper worksite at Koper tovorna station, the hall represents the latest rolling stock maintenance facility in Slovenia.

he worksite is strategically placed to have a direct connection with Luka Koper, and is hence of particular importance in keeping the whole rail network congestion-free as well as important to domestic and international rail undertakings alike. The worksite provides fast breakdown service without the need to move vehicles to Divača shop, which would take up valuable capacity on the already congested main line to Koper. It also means more capacity for other freight services on that line. The Koper worksite mainly offers rolling stock maintenance with a focus on running repairs for freight wagons. It has two maintenance tracks, of which one is electrified to accommodate electrical locomotives. The electrified track also has an under-floor inspection pit. The hall is 57.06m long and 17.5m wide, measures 7.14m and 8.14m in height at the roof's edge and ridge, respectively, and has four automated sectional doors. New lifting equipment featuring eight hydraulic lifting jacks has been purchased recently to improve work safety and enable lifting double carrier wagon units and twin-wagons.

The hall has all the air and electricity supply connections required for effective wreck repair on wagons. Through delivery of this project, we will meet our targets with respect to the conditions of work; the reliability, quality, speed and value for money of maintenance services supplied to fleet owners; the opportunities for increasing maintenance volume and revenue; boosting productivity; reducing congestion on the main line between Koper and Divača; and with respect to safety improvements in rail transport.

### Centre Ljubljana

# Centre Ljubljana workshop continues diversifying services

Our shop in Ljubljana has been gaining ground recently with international clients, mostly owners of electrical tractive stock and a few diesel stock owners, who require locomotive servicing close to the network their units are operating on. On top of being accessible, the shop combines quality of service with affordability.

A coording to our expectations and plans, the share of sales gained on foreign markets will increase in the following years. From routine maintenance to overhauls, we supply services at competitive levels. This is recognized by a number of clients from countries such as Austria, Germany, Czech Republic, Croatia and even England who order overhauls for their stock despite not operating on Slovenian rail network.

We do routine maintenance on virtually all types of electrical locomotives, including those not owned by SŽ,

such as Siemens EuroSprinter (ES64F4) and Vectron, and also carry out small repairs and servicing of Siemens EuroRunner, nicknamed Hercules. Overhauls are done on the ES64F4, which were running service on Slovenian network before Siemens Taurus units (ES64U4) were purchased. Originally, we could only do inspections for ES64F4, but we have grown our know-how since and are now able to supply a complete service together with overhauls, which are performed in-house.

Working together allows us to continue expanding our maintenance range. With wheel replacement for Taurus locomotives now done in-house, we are looking at new opportunities to supply complete maintenance on such and similar units.

New customers bring new work, new skills and new opportunities. Our major occupation is maintenance of the entire Slovenske železnice's fleet, nevertheless we are open for new challenges. We are aware of the meaning of following the needs of the market and thus put all our effort in the development of the company.



New Projects

## Dobova – A One Stop Shop for Tank Wagons





- Repairs and revisions of all types of tank wagons (excluding gas transport wagons)
- Maintenance of bogies
- Maintenance of wheelsets and of draw and buffing gear
- Renewal, installation, and testing of brake devices
- Non-destructive testing
- Repairs and removal of wagon damage and defects (e.g. cracks on welded joints, tank cracks, cracks due to fatigue, bogie cracks etc.)
- Pressure testing of tanks (also for transport of dangerous goods according to RID)
- Washing and cleaning of wagon inner side (including petrol, crude oil, mazut (fuel oil), benzene and chemical substances) and outer side
- Painting of the whole wagon



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We are accredited to

carry out pressure testing

destructive testing (NDT) as

well as all the authorizations

required in rail vehicle and

of equipment and have

a certificate for the

performance of non-

component welding.

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**Major overhaul on Siemens Taurus** 

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In mid-June 2021, our Ljubljana depot completed a major overhaul of the 541-004 Siemens Taurus, the first multisystem electric locomotive in SŽ-Tovorni promet's fleet. Volume-wise, major overhauls are the most extensive type of maintenance done at our shops. This particular overhaul was carried out eight years after the locomotive's mid-life overhaul, or after 16 years in service. The depot in Ljubljana is specialised in the maintenance of electric traction – including the newest generation of locomotives – but any task of this magnitude or similar such first-time overhaul always requires careful preparation with respect to technical equipment and staff assignment.

After a few equipment adjustments, our team of technicians from various areas completed what was the first major overhaul of such locomotive, which involved a number of additional tasks compared to mid-life overhaul, such as replacement of the DC- and AC-main switch, renewal of pantograph control panel, replacement of the circulation pumps of the transformer and cooling tower, drive unit movement limiters, spherical bearing of the traction motor stator, disassembly and assembly of the brake axle, and replacement of silent blocks.

Major overhauls involve a thorough inspection of locomotive components. Each component is dismounted and the repairs are done in-house with some outsourced to our partners. Work on the 541-004 involved repairing the pantograph control panel and blower fan, replacing the bogie rubber parts, impregnating the auxiliary power unit, overhauling the bogies, replacing the monobloc wheels on powered wheelsets, renewing the brake shaft clutch and brake rigging, and reconditoning the wheel flange lubricators and sanding system of the body. Two of the tasks – rubber parts replacement and blower fan balancing – were done for the first time, so we had to customise some tool and purchase additional equipment as well as do some space rearrangement in the depot.

At present, fifteen overhauls have been carried out and we are almost on the half-way to the whole Taurus fleet being overhauled.





## SŽ - VIT certified for complete Vectron locomotive maintenance



In spring 2022 we passed the certification to deliver I3 inspections without assistance on Siemens Vectron locomotives. Once our crew was certified to perform the first three levels of servicing, it was time to tackle the final level of inspections to satisfy the demand for these services. Before the certification audit, we were delivering this maintenance type under the supervision of an industry professional, who was a representative of the unit's owner. After successfully completing the training in Munich, our maintenance crew obtained the certificate attesting that we are qualified to perform, without third party assistance and supevision, all four levels of maintenance on said locomotives.

Maintenance of Vectron locomotives is provided to owners of all kind - from rail undertakings to locomotive leasing companies. SZ - VIT is also partnered with maintenance depots which specialise in Vectron locomotives. Inspections aside, we are now qualified to deliver overhauls (also known as "revisions") on Vectron units, as well.







**Overhauls of Uacs wagons** 

### Inspections of Stadler EMU and DMU



Between 2020 and 2022, a total of 52 passenger trainsets by the Swiss rolling stock manufacturer Stadler were delivered to Slovenia for the passenger operator SŽ-Potniški promet. The delivery comprised 21 FLIRT diesel multiple units (DMUs), designated Class 610, and 21 FLIRT electric multiple units (EMUs), designated Class 510, along with 10 double-deck EMUs of the KISS family, which were designated Class 313.

Soon after the delivery of the first batch of trains, the first of the new FLIRT units entered our shop in Ljubljana for an inspection. Although the inspection timeline for the new DMUs is nothing like the maintenance plan of SŽ fleet we typically service, our experience with the maintenance protocols of non-Slovenian fleet owners made the learning process significantly faster. Inspections of the new DMUs come in twelve levels spread over 30-day intervals.

Shortly after our Ljubljana shop started inspections on the DMUs, a batch of 11 FLIRT EMUs was delivered to SŽ-Potniški promet. These units came in for level M0 inspection a month after delivery, and for M1 inspection two months later, or three months since delivery. Low-level inspections – which mostly concern underframe components – of Class 510 and Class 610 are very similar because the units have the same underframe. Coming from the FLIRT family of Stadler trains, the classes share the design but not the source of power - Class 610 runs on diesel while the 510 is powered by electricity. Compared to M0, M1 inspection on Class 510 EMU only has some extra work to be done on certain roof components.

The first double-deck KISS electric multiple unit, designated Class 313, was delivered halfway through 2021, with the remaining nine following in January 2022. Bi-level trains were the first of their kind in Slovenia and posed a fresh challenge for our shops, so we had to make adjustments to the inspection pit and organise additional training of the maintenance crew. The training process is currently underway and will continue until we learn everything we need to know about the maintenance for Stadler trains.

After a year in service, Class 610 units had to come in for M5 annual inspection, which involves notably more maintenance work compared to the previous levels. Another year later, the first five DMUs required level M7 inspection, which is conducted at the 720-day mark according to the maintenance manual. While low-level inspections are mostly about checking, testing and inspecting components and installations, levels M5 through M7 include a good degree of cleaning, which leads to longer downtime. A lot of time is also spent on servicing electric components. M7 comprises an inspection of the main and auxiliary reservoir and replacing the compressor filter and the filter of the air dryer.

Level M5 annual inspections on double-deck KISS units were started at the end of 2022, with M7 to be carried out halfway through 2023 on Class 510 EMUs after being performed on Class 610 units around the same time in previous year.



The Hungarian company Pultrans possesses and leases 690 tank wagons of various types for powder cargo. Maintenance services for these wagons on the Slovenian rail network are provided at the Dobova Centre. Towards the end of 2022, we performed a G4. 0 overhaul and refurbishment of the filling/discharging system on 14 Uacs tanks. The project was completed in January 2023, and in March, a new shipment of 9 wagons was delivered. We hope to expand our partnership by providing regular maintenance services for these wagons.



### **Overhauls of Sggrrs wagons**



At the Dobova centre, we perform overhauls in accordance with the VPI for 14 international companies, one of which is Innofreight. The company is renowned for its innovative solutions in freight transport, specifically the Sggrrs series of modular flat wagons. These wagons can be fitted with various superstructures to accommodate different types of cargo.

Since 2022, we have been performing the G4.2 overhauls of Innofreight's Sggrrs wagons. 24 wagons are scheduled for overhaul in 2023. Our goal is to progressively increase this number in the coming years, as Innofreight is an ambitious company that is constantly expanding its wagon fleet.





### Major overhaul of locomotive 732

Diesel locomotive 643-037 sold to Rail&Sea



At the Maribor Centre, where we specialise in maintaining diesel vehicles, we also provide maintenance services for locomotives owned by external parties. One of them was a 732 series locomotive from Rail&Sea, which arrived at our workshop for a customized, limited-scope overhaul. This particular locomotive had been under repair at another company for several months; however, as one of the customer's requirements involved sealing the gear units produced by Maybach, the company opted to withdraw from conducting the overhaul on this vehicle.

Our technicians at the Maribor Centre also didn't have any experience with such gear units, as all vehicles of this series used by Slovenian Railways are equipped with gear units manufactured by Voith. However, they managed to disassemble these units, apply hard chrome plating to the shafts where the oil seals are installed, and fit new ones. Following the test run, no oil leakage was detected at the output shafts.

New pressure vessels, LED lighting, and MESA 23 DUAL MODE were installed on the locomotive to accommodate its operation in Croatia. Naturally, we have adjusted the braking and safety devices to comply with the legal requirements.

In 2022, the shunting locomotive was sold to a company in Slovenia, and its maintenance was entrusted to our workshop.



During the mid-level overhaul of Rail&Sea's 731-V82 locomotive, we initiated discussions regarding the potential delivery of a 643 series shunting locomotive. We presented the customer with two options for the 643 series locomotive: an engine replacement (remotorisation) or a classic overhaul.

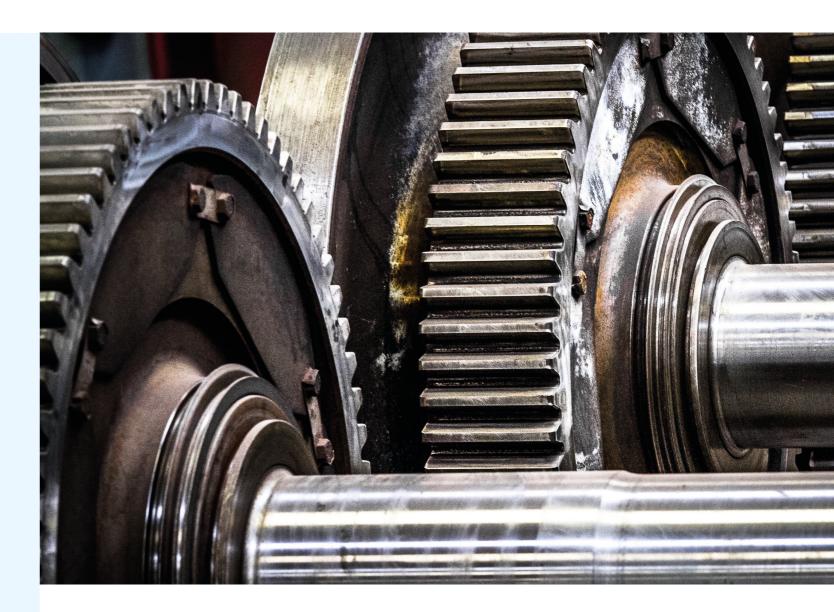
Following their decision to opt for a classic overhaul, they selected locomotive 643-037, which was situated at the Zidani Most workshop, after reviewing all the locomotives of this series owned by SŽ - VIT.

The scope of work for the major overhaul was executed in accordance with the existing terms of reference for a major overhaul, along with some additional requirements, as follows:

- installation of monobloc wheels (locomotive newly registered in Croatia - Agency requirement),
- installation of the ATS RAS 8385 IS safety device,
- installation of GSM-R Mesa 26 DUAL MODE,
- construction of an oil sump under the diesel engine, construction of side covers following the system used for remotorised locomotives,
- installation of a device for external charging of batteries,
- painting according to the customer's preferences.

Despite the challenging circumstances during the COVID-19 pandemic, the locomotive was successfully handed over to the customer on 19th February 2021. The locomotive is operating in Croatia. We are in the process of preparing a long-term maintenance contract with Rail&Sea for the locomotive, covering both field services (CP, P1 and P3) and those provided at the Maribor workshop (CPP6, P12 and IP). We have received feedback indicating that the drivers are highly satisfied with the locomotive's performance.

## There are no safe vehicles without safe wheelsets



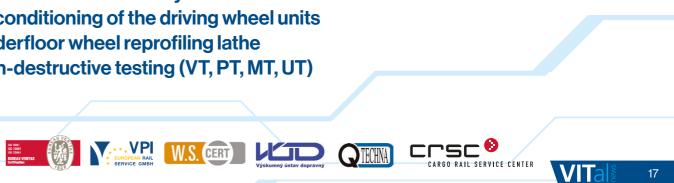
### **VIT keeps them FIT**

- IL, IS1, IS2, IS3
- New wheelsets according to TSI
- Replacement of wheel tyres
- · Reconditioning of the driving wheel units
- Underfloor wheel reprofiling lathe
- Non-destructive testing (VT, PT, MT, UT)



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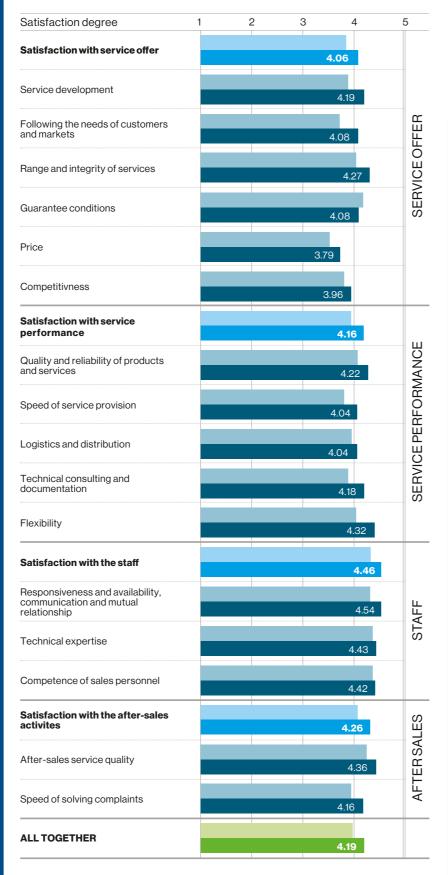
## Customer satisfaction measurement

With a response rate of 55.56%, this year's customer satisfaction measurement included a total of 30 companies from Slovenia and other European countries, which order maintenance services at SŽ - VIT. While the survey targeted our clients from every service segment, most responses came from the regular users of our freight maintenance service (wagon and wheelset servicing).

verall, our partners are found to be very happy to do business with us, as shown by an average score of 4.37 (on a rating scale from 1 to 5) in the business cooperation category, which is slightly up on the result from last year. Looking at individual categories, customers seem to be most satisfied with our staff, followed up by the aftersales activities. Slightly lower ratings were given to service offer (prices, competitiveness) and service performance (speed of service provision, logistics and distribution), both being rated higher than 4. With improvement in customer experience noted in almost every category, the company reached a total average of 4.19 putting our services at a good place from which we can work on making things even more successful.

Overall, the survey results for 2022 have met our expectations, almost everyone would recommend SZ - VIT to their partners, while 80% expressed a wish to become our strategic partner in the following three years. That does not leave us complacent about the future, but rather the opposite – we set ever higher goals to achieve, blending established practices with hard work along the way.

Last but not least, we wish to express our appreciation to everyone who participated in the survey, giving us valuable feedback which will help us become an even better partner.



satisfaction degree of the group 2021

- satisfaction degree of the group 2022
- satisfaction degree 2021
- satisfaction degree 2022



## Slovenske železnice TONEL GATX MILLET ermewa ADRIA **EGRAD** КОМВІ Rail Cargo Group Rail Sea Port of Koper ITL G CAPTRAIN



Committed to your logistics

## VIT KEEPS YOUR RAILWAY VEHICLES FIT



## ONE-STOP SHOP FOR YOUR RAILWAY VEHICLES MAINTENANCE

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