

Railtalk | Magazine xtra

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Submissions

Pictures, articles and news can be entered through the forum, or by email to us at:

entries@railtalk.net

Please include a detailed description and credits.

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Pg 3 - Pictures

David

Once again many thanks to the many people who have contributed, it really makes our task of putting this magazine together a joy when we see so many great photos. This issue wouldn't be possible without: Ken Abram, BVT, Brian Battersby, Mark Bearton, Steve Dennison, Dave Felton, FrontCompVids, Paul Godding, Carl Grocott, Richard Hargreaves Dave Harris, Stuart Hillis, Keith Hookham, Richard Jones, Anton Kendall, Steve Madden, Phil Martin, Mike Morant, Chris Morrison, Gerald Nicholl, Chris Perkins, Mark Pichowicz, Andy Pratt, Gary Smith, Laurence Sly, Railwaymedia, Steamsounds, and Steve Thompson.

Front Cover: Latvian No. 2TE116-933 first entered traffic in February 1985, it outshopped in this blue livery by the works in Daugavpils in May 2013, and it is seen climbing the grade with a northbound loaded coal near Trepmuiza on April 10th. Chris Perkins This Page: Hungarian MAV Class 418-170 approaches Sap station with train No. IC367 'Hargita', the 06:15 Budapest Keleti to Brasov (Romania) on March 1st. Steve Madden



As I write this I can only think what another excellent month it has been for the European rail scene. Both in Mainland Europe and in the UK there has been so much happening. In Mainland Europe the Siemens Vectron seems to be getting into new territories and whilst I am a very big fan of the ES64 range, the Vectron does look very good. However Bombardier have not been outdone with their latest TRAXX deliveries. The only negative in all this that I can see it the fact that in Germany, DB will be reducing its fleet of the much loved Class 218s. In the UK the new Voith Class 68s have at last entered traffic along with some more of the GE produced Class 70s. It all makes for a really interesting hobby.

Our from the UK this month features the Nene Valley Railway, which had a fairly packed diesel gala. I say packed both in terms of the amount of locos operating and the amount of passengers attending. Well done to them for such an entertaining gala, but possibly they went a little 'over the top' with the amount of locos attending.

Anyway till next month and as always keep sending in the photos. If you are going on holiday please don't forget to take the camera.

















































































































Bombardier Delivers TRAXX Diesel Multi-engine Locomotives to Südostbayernbahn in Germany

Powerful, innovative, fuel-efficient and quiet locomotives
A total of eight locomotives pull passenger trains between Simbach
and Munich

Rail technology leader Bombardier Transportation has started delivering its innovative BOMBARDIER TRAXX diesel multi-engine locomotives. One of the first customers, Südostbayernbahn (SOB), recently presented the locomotive on the SOB premises in Mühldorf, Germany.

The new locomotive boasts an overall performance of 2,252 kW and a top speed of 160 km/h. It meets the EU emission standard level IIIB and is fuel-efficient and quiet. A special feature makes all this possible: the locomotive's multi-engine concept of four diesel engines with a performance of 563 kW each. The diesel engines can be switched on and off individually as required so the locomotive only uses the energy it actually needs.

"The purchase of eight class 245 TRAXX P160DE multi-engine locomotives is the biggest investment of Südostbayernbahn in the company's history," said Christoph Kraller, Director of Südostbayernbahn. "We are looking forward to transporting our passengers even more reliably and environmentally friendly in future." The locomotives will bolster SOB's fleet, operating on its rail network from the middle of 2014. They will primarily pull the long double-deck trains on the main line between Simbach and Munich, in southeast Bavaria. "The deployment of these locomotives by SOB shows that Bombardier Transportation is successful in developing innovative products for passenger and freight transport," said Ulrich Jochem, President Locomotives, Bombardier Transportation.

About the DB regional network Südostbayernbahn (SOB)

SOB is as medium-sized company, one of seven regional networks in Germany and one of the major transport operators in southeast Bavaria. The red SOB multiple units and double-deck trains run between Munich and Salzburg, Passau and Rosenheim as well as Landshut and Traunstein. The wholly-owned subsidiary of Deutsche Bahn in Bavaria has more than fulfilled the goals set at its creation in 2002: customer satisfaction, punctuality and employee satisfaction are high and SOB is recognized regularly for its quality of service, including by the passenger organization PRO BAHN.

SOB unites the different segments of rail transport under one roof – infrastructure, stations, operation, service and sales. This results in optimal service for approximately 34,000 rail customers daily. More information is available at www.suedostbayernbahn.de or on Facebook at DB Bahn SüdostBayernBahn.

A look back at the NS 150 event, 25 years ago.

The Dutch railway's NS150 event took place over a six week period 25 years ago running from the end of June 1989 until the first weekend in August. There were, however, preparatory stock movements and here we see two that took place on June 17th, a week before the main event really got under way. All text and photos: Mike Morant



The NS150 royal opening at Utrecht was on the Wednesday following those stock movements but what wasn't generally known was that there was a gathering of steam locos at the south end of the station which was restricted to dignitaries and accredited photographers of whom there were very few.



Top left: On June 17th, the SHM's 0-6-0WT No. 7742 'Bello' travelled from Hoorn to Utrecht under its own steam (with a diesel pilot through the IJ tunnel) and is depicted here at Wijderwormer with its trainload of thrilled paying participants.

Top right: Later on the day, preserved BR EM2 No. 27000 'Elektra' hauled the same former Zillertalbahn stock from Utrecht to Arnhem whence it was supposed to return to Utrecht behind the visiting Swiss 2-10-0 steamer No. 2978 but this had failed en route. This is No. 27000 hurtling past Maarn on its outward journey.



Bottom left: GWR No. 3440 City of Truro is depicted with the NS head office as its backdrop and in the company of industrial 0-4-0T No. 657 Kikker and the HSM's Bello.
Bottom right: SBB 2-10-0 No. 2978 and SNCF 141R No. 420.



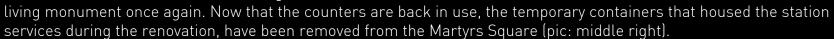
The Renovation of Leuven station comes to an end

Belgian station building gets its splendour back. All photos and text © BVT

Since Sunday, March 30th 2014, travellers can once again go back to the counters in the renovated station at Leuven. They will immediately see the result of three years of renovation (pic: top right). The restoration of the historic station and the former waiting rooms took laborious work of specialists.

The neoclassical facade has also been restored to its original splendour. NMBS has invested over 10 million euros and in June shops and additional services will be available to travellers.

The restoration of the station building is the final piece to make the station as an ideal mobility hub and meeting place. Leuven has 30,000 travelling passengers per day, therefore it is one of the main stations of Flanders. With this ultimate renovation, the station building is a



The station services all moved to the central and side tower (Tienen side) where new modern offices were created.

Renovation commenced in the second half of 2010 with the inside of the station building and the facade on the side of the tracks.

The top floor and the side towers of the station building had become unusable for reasons of fire safety and layout. The side towers and the side area of the square central tower which contain no valuable historical elements were completely stripped inside. All the former floors

were removed, only the outside walls were left standing. Project engineer Ben Janssens, his team and architect Koen Nivelle designed a construction through which an extra level was created thanks to the great heights of the former levels. A system of steel columns and profilated steel decks (pic: bottom right) gave flexibility and strength both in the

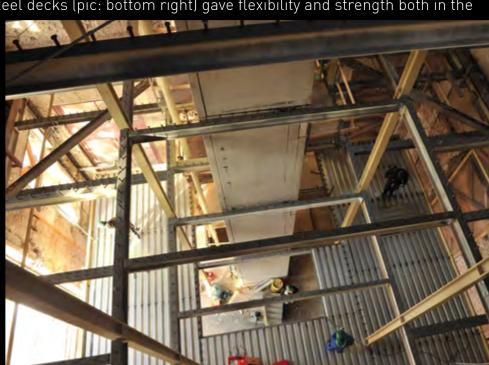
two towers and at the back part of the central tower.

With elevators, in each of the three towers and stairs, 6 levels with 2400 sq ft space (contemporary office, technical space, lavatories ...) were created, without disrupting the sight from the station square. 4 levels of the side tower (side Brussels) will be reserved for satellite offices. NMBS currently looks after the offer of candidate operators.

The Second World War did not only badly damage the original platform roof but the building itself was not left unharmed from the battle and was never restored to its original splendor. The building also underwent a number of changes, to satisfy the needs of travellers.







In the 1950s the counters and the buffet moved to the 2 waiting rooms on either side of the central hall because these waiting rooms became less used. With the renovation, the counters got back their original place in the central hall.

With the commissioning in 1879 of the station in neoclassical style, the architecture had to radiate the national pride and the thriving economy. With its high altitude and limited depth, railway engineer Henri Fouquet awakened a monumental impression in the central hall. This space effect was lost by applying a false ceiling and the functional reorganization of the hall in the 1950s (pic: top right).

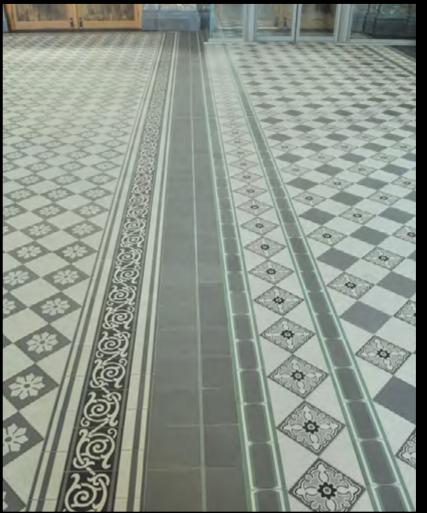


During the renovation works, this false ceiling was removed in the central hall and the life-sized bas-reliefs of Gerard Van der Linden (pic: middle right) situated above this ceiling, who had been blocked for more than sixty years, were meticulously restored. They were carefully covered for the duration of the remaining work again.

The passionate team bumped regularly into surprises and the restoration took a lot of (historical) research, including the research of building materials used. During the demolition of the old floor, restorers stumbled on the original floor tiles in cement. After some search a manufacturer of ceramic tiles was found who could make a copy of the original tiles. In both wings a tile floor of 330 sqm in total, with the original beautiful design, can be found. (pic: bottom left)

Repairing the damage to cornices and wall decoration required laborious restoration. In the central hall, where passengers buy their tickets at the new counters, there is a marble floor 170 sqm, which pursues a maximum of the original view (pic: bottom right)....







The Renovation of Leuven station continued

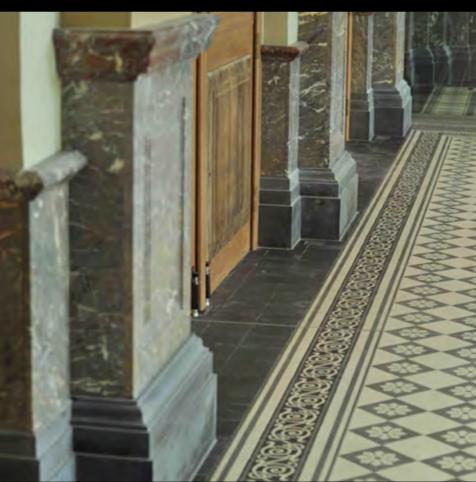
All photos and text © BVT

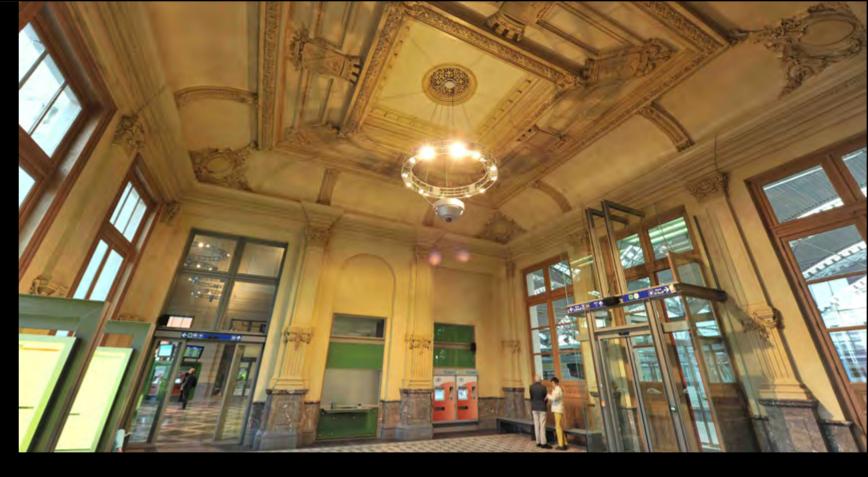
... The two wings of the central hall have resumed their appearance. They were originally used as waiting rooms 1st/2nd and 3rd class. In the waiting room on the Tienen side (1st/2nd class) thick old paint from the ceiling was removed (pic: below) so that the details of the ceiling can once again be viewed in all its glory.



The beautiful decoration of walls and pilasters have been constructed again (pic: right). In the waiting room on the side of Brussels, which formerly housed a buffet, the wooden roof structure was so badly affected by the woodbeetle, that it had to be replaced entirely, together with the damaged ceiling. In this former waiting room a contemporary successor to the former buffet will be integrated in the beautiful heritage decor. Walking through the two wings, the travellers can easily access the platforms. In the wing (Tienen side) is a special ticket window for wheelchair travellers (pic: far top right).

Over time, the neoclassical facade on the side of the tracks underwent various adjustments, partly due to the increase of the adjacent platform, and had a lot of water damage. Because of the many renovations through the years, the uniform appearance of the facade had been lost. The heavily mutilated historic joinery was completely rebuilt from the original plans.





In combination with the maximum use of authentic wooden door pieces which were still usable, this resulted in an unique combination of old and new joinery. Now the 15 wooden doors on the platform side form a harmonious whole again. Over the last decades, the entire station area on the Martyrs Square underwent a resurrection. Also, the outer walls of the station were thoroughly renovated. Crowning glory was the replacement of a group of statues above the pediment of the front facade in 1997. A new station clock was also placed during the recent renovation (pic: below). Earlier on, a pedestrian subway, giving access to the 9 tracks was completely modernized. Over the platforms and tracks a modern platform roof of steel and glass was constructed. Then began the complete reconstruction of the Martyrs Square. A new bus station, underground parking and a tunnel for through traffic were constructed. The square itself is low traffic. And so, now, the whole station area is a modern place, with respect to history. And the station building can again be a key figure of the station area that is teeming with life.

On April 25th 2014 NMBS CEO, Mr Jo Cornu, and the mayor of Leuven, Mr Tobback officially inaugurated the station building.





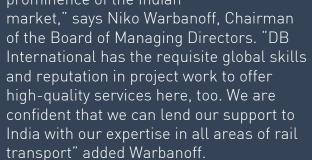
DB International enters the Indian market

DB International has won a key contract in India. The company has been entrusted to act as the quality and safety consultant for Kochi Metro, an elevated railway more than 26 kilometers in length with 21 elevated stations and one depot. Energy is supplied with a 750 volt DC third rail. Work on the project has already been underway since February.

DB International, a DB AG company, is rising to meet this new challenge by opening a branch in Bangalore. Taking this step will bring Deutsche Bahn's experts into close proximity with the important Indian market, clients and projects, giving them the opportunity to build local expertise in railway construction.

"This initiative has strategic significance in

light of the continuing process of globalization and the rising prominence of the Indian



India is endeavoring to strengthen and stabilize its economic growth. The precondition for this is a rapid expansion of infrastructure. That is why investments equivalent to some EUR 200 billion are planned in the next 10 years to meet India's need for high-quality rail infrastructure. There are plans to build new routes and to improve existing routes for high-speed transport, rail freight transport, S-Bahn rapid transit trains and U-Bahn underground trains.

Alstom to supply 50 KZ8A freight locomotives to Azerbaijan



Alstom has been awarded a contract to supply 50 KZ8A freight locomotives to Azerbaijan Railways (ADDY) which will be assembled in Alstom's JV EKZ between 2016 and 2018. The total amount of the contract is 300 million euro. Alstom's share amounts to around 150 million euro. The contract was signed in the Azerbaijani capital of Baku in the presence of the French President Francois Hollande and the President of Azerbaijan, Ilham Aliyev. The contract may also include the construction of a depot, technical assistance and maintenance, as well as training for ADDY staff. These are subject to negotiation within the next six months.

KZ8A locomotives rank among the most powerful locomotives in the world (8,800 kW) with asynchronous traction, able to run at 120 km/h and to haul up to 9,000 tons. The KZ8A electric locomotives for this contract will be assembled in Alstom's JV manufacturing site in Astana, Kazakhstan.

"Azerbaijan is a strategic transit point between Europe and Central Asia. The modern KZ8A freight locomotives will help increasing its carrying capacity in transportation of raw materials and goods," said Thibault Desteract, SVP Alstom Transport Russia and CIS.

The total length of Azerbaijan's rail network is 2,932 km, of which 1,278 km is electrified (3 kV). In 2006 Azerbaijan railways launched a long-term program for the renovation and modernization of its railways, including its traction fleet, reconstruction of infrastructure, and a gradual switch from DC to AC. According to the latest forecasts, the volume of the railway traffic in the country should almost double by 2017 from current figures.

Alstom also signed on 12 May a Memorandum of Mutual Cooperation with Baku Metropolitan with a view to develop modern metro cars for both the new lines and the gradual replacement of the existing fleet of Baku metro. Both parties have agreed to sign a final agreement in the coming two months.



Škoda Transportation will deliver Catenary-free trams to Turkey



Škoda Transportation will deliver twelve "catenary-free" trams to Turkey, as a follow-on to the delivery of sixty ForCity Classic (28T) trams to the Turkish city of Konya. The trams are also ForCity Classic, but this time they will be fitted with the newest battery-powered "catenary-free" drives, which enable the vehicles to move independently of the traction wiring, with a range of 3 km. The trams will be delivered in 2015. In total, 72 trams will be delivered to Konya with a value of 3.4 billions Czech crowns.

"We are delighted for this 20% contract extension and are pleased to supply additional trams, equipped with Skoda's "catenary-free" package. This new order is a clear testimony of our customer's satisfaction with the trams delivered so-far. These vehicles will be used on a new line, which has a 1.8km long section without catenary wiring. In total, we will deliver 72 trams manufactured by Škoda for the Turkish city of Konya. Moreover, by developing and manufacturing a catenary-free tram, we confirmed, one more time, that we are able to meet the short customer delivery schedule, combining the latest "nano-lithium-titanium" battery technology and competitive solutions," says Zal Shahbaz, Sr. Vice-President of Škoda Transportation.

The first tests of the new drive took place on the trial track on the Škoda premises in Plzen in the presence of a certified person from the Railroad Research Institute (VUZ). Testing was done on the ForCity Classic tram from the first series of sixty pieces for the Turkish city of Konya. "The tram managed to accelerate thirty times to 30 km/h for a total of 8 km without recharging. The "catenary-free" solution of Škoda means that, in practice, the tram has a range of 3 km without power from the pantograph at the speed of up to 30 km/h," explains Milan Šrámek, Electric Product Manager of Škoda Transportation.



The battery-powered tram drive is used especially in cases when the tram needs to go into areas without catenary, for example in historical centres of cities where there are no trolleys for aesthetical reasons. The drive can also be used in case of a failure of the upper electric wiring, to move the tram away, so that it does not obstruct the flow of traffic. The batteries of the catenary-free trams are situated in special roof mounted containers, in which various types of batteries and/or super-capacitors can be placed according to the required nature of tram operation. In the case of trams for the Turkish city of Konya, Škoda is going to use high-performance batteries with nano-lithium-titanium technology. The batteries are always recharged during tram operation under the trolley in just a few minutes.

The business group Škoda Transportation has also already been manufacturing battery-powered trolleybuses for a long time. In 1998-2003, 272 Škoda trolleybuses for San Francisco were fitted with batteries, so that they could be operated independently of the trolley. The first prototype of the new generation battery-powered trolleybus was developed by the daughter company Škoda Electric back in 2003. This year, twelve vehicles in total with a range of ten kilometres at the speed of up to 50 km/h will be delivered to the Hungarian city of Szeged.

Škoda Transportation will produce a record-breaking number of 115 trams this year. In the last few months, modern trams were launched in Turkish Konya and in Hungarian Miskolc, and the first prototype of the licence vehicle was manufactured in China. The first prototypes of new trams will also be delivered to Bratislava and the Prague Transport Company will buy more than thirty of the latest state-of-the-art ForCity Alfa trams.



The first of Seven Talgo Trains have been handed over to Russian Railways



The first of the seven trains Talgo that the Russian state operator RZD Talgo commissioned in June 2011 has been delivered in Moscow to start the test period at the test circuit in Shcherbinka. Its entry into commercial service, once the tests are completed, will be in late 2014.

Four units are of fixed Russian gauge (1,520 mm) and dedicated to the service between Moscow and Kiev, while the other three are of variable width (1,520 mm and 1,435 mm). The latter operate in the Moscow - Minsk - Warsaw - Berlin route. The width change is made automatically in Brest, eliminating the change of bogies that current trains have to endure.

Contract

In June 2011, Talgo signed a contract to supply trains for next generation speeds of 220 km/h with Russian Railways, with the promise of June 2014 deliveries.

The units are made of aluminium, can reach 200 km/h, equipped with air suspension and also incorporate Talgo's own passive tilting system to favour reducing travel times by 30 percent approximately on existing track. The trains are also equipped Talgo RD system wide change to connect Russia with bordering countries allowing transit between different gauges without having to stop the train.

Rolling stock procurement for North-South services: SBB orders 29 new trains from Stadler Rail.



SBB is buying 29 new internationally operable multiple-unit trains for its North-South services from Stadler Rail. The deciding factors were Stadler Rail's top ratings in terms of overall value for money and customer requirements. The total order volume comes to just under CHF 1 billion. The new trains will enable SBB to offer its customers sufficient seating capacity, more comfort and reliable services following the opening of the Gotthard and Ceneri base tunnels and the expected resulting growth in demand. As contractually agreed with Stadler Rail, the trains are to be successively taken into service from end-2019 onward. SBB is commissioning Stadler Rail to build 29 new international multiple-unit trains for north-south services. The volume of the order comes to just under CHF 1 billion. SBB launched the tender procedure for 29 new trains in April 2012, and awarded the contract today.

"The decision was clear: Stadler Rail best met the tender criteria by far and is offering us a very customer-friendly train", says SBB CEO Andreas Meyer. Stadler Rail obtained top ratings for the two most heavily weighted main criteria: its bid excelled in terms of overall value for money (40%) and innovation (25%), especially in respect of customer requirements such as design and passenger safety. With regard to the two other criteria – technology (20%) and fulfilment of contractual requirements (15%) – Stadler Rail's offer was comparable to those of the other bidders. "We want the best train for our customers. When it came to the train's design, customer focus was the top priority and the technology being used is tried-and-tested", says Jeannine Pilloud, head of SBB's Passenger Division.

Three rolling stock manufacturers – Alstom, Stadler Rail and Talgo – submitted bids for this major order. The decision was preceded by a lengthy procedure in accordance with the Swiss federal law and ordinance on public procurement. The evaluation criteria were listed in the public invitation to tender at simap.ch. According to the legal stipulations, the proportion of added value in Switzerland was not a criterion. Stadler Rail says it will have the trains built in Bussnang (Switzerland). As well as the additional 29 trains now ordered, SBB is securing contractual options on up to 92 more.

New trains to offer more seats and comfort.

The new multiple-units, each of which will have two power cars and be up to 400 metres long, will operate at speeds of up to 249 km/h and provide over 800 seats. That is about 40 percent more than the current 230 metre long ETR 470 trains. In accordance with the law on equality for disabled persons and to meet customer requirements, SBB has opted for low-floor boarding, thus facilitating access for elderly persons or people with luggage and prams, for example. Each train will have two wheelchair-accessible toilets and gangways providing connections between 1st and 2nd class accommodation and to the restaurant car. Other features include separate men's and women's toilets, spacious luggage storage areas and a passenger information system with electronic displays. Quiet, family and business zones will also be provided, along with power sockets at all seats and new signal boosters for improved mobile phone reception.

Noticeable improvement to services through the Gotthard.

The new trains will enable SBB to offer its customers sufficient seating capacity, more comfort and reliable services following the opening of the Gotthard and Ceneri base tunnels and the concomitant growth in demand. About 9,000 people a day currently travel through the Gotthard on SBB trains. By 2025 the number of travellers is set to more than double thanks to faster and more frequent services, and SBB is already expecting the number to rise to at least 15,000 daily by 2020. According to the contractual agreement with Stadler Rail, the new trains will successively come into service as of the end of 2019. They should be authorised for use in Switzerland, Germany and Italy, and will initially run between Basel/Zurich and Milan before eventually being deployed on other - especially international - routes. On the Gotthard route, the trains will eventually replace the ICN and ETR 610 tilting trains. For the transitional period up to end-2019, SBB has ordered eight additional ETR 610 tilting trains. These ETR 610s will already start operating as of 2014, replacing the ETR 470 trains, which will be taken out of service.

Once the Stadler Rail multiple-units are commissioned, the ETR 610s will be redeployed on the Simplon line and the ICNs on sinuous routes such as that along the southern foot of the Jura. Thanks to the new trains, SBB will have sufficient modern and customer-friendly rolling stock for north-south services not only in the near term but for the long-term future as well. In total, SBB is investing about one billion francs a year in new rolling stock over the next few years.



Bombardier will provide crews for the West Coast Express BiLevel commuter rail fleet



Rail technology leader Bombardier Transportation launched in May its crewing services for TransLink's highly successful West Coast Express commuter rail system in the Lower Mainland region of British Columbia.

Bombardier will provide crews for the West Coast Express BOMBARDIER BiLevel commuter rail fleet of 44 vehicles. Nearly 1,200 BiLevel cars are already in operation across the United States and Canada. Over the last 20 years, Bombardier has grown to become the North American leader in operations and maintenance services for public transit authorities. Every day, Bombardier Transportation employees across the world launch more than 60 fleets of transit vehicles into safe, reliable and efficient service, providing passengers with an exceptional transportation experience.



"Safe, reliable and courteous service is what our West Coast Express customers have come to expect," said Fred Cummings, President and General Manager of British Columbia Rapid Transit Co. Ltd (BCRTC). BCRTC is an operating subsidiary of TransLink, the regional transportation funding and planning authority, and is responsible for West Coast Express.

"West Coast Express routinely boasts the highest customer service ratings in our regional transportation network, and we look forward to continuing that trend with Bombardier providing crewing services," said Cummings.

"Bombardier is proud to support and partner with West Coast Express in its efforts to further enhance its reputation for reliability and outstanding customer service," said Raymond Bachant, President, Bombardier Transportation Americas. "All our employees are committed to offering safe, high-quality, on-time train performance to the passengers of West Coast Express," he added.

Bombardier has a long-standing track record of providing operations and maintenance services to transit systems across North America including Agence Métropolitaine de Transport in Montréal, GO Transit in Toronto, the Maryland Area Regional Commuter (MARC) Train Service, New Jersey Transit, North County Transit District in California, OC Transpo in Ottawa, the South Florida Regional Transportation Authority, the Southern California Regional Rail Authority and, since May 1, 2014, the Central Florida Commuter Rail Transit project (SunRail) Train Service. Bombardier also supports transit systems with overhaul and refurbishment programs and material and technology solutions.



Bombardier Acquires Australia's Rail Signalling Services (RSS)



Rail technology leader Bombardier Transportation has purchased a 100% stake in the Australian signalling company Rail Signalling Services (RSS). RSS is an integrated signalling engineering and services supplier with a strong presence in the market, particularly in Victoria and Southern Australia.

RSS' core business is the design, delivery and installation of station interlocking and level crossing systems for mainline and mass transit operations. The acquisition will enable the expansion of signalling activities in a market where large investments are planned and strengthens Bombardier's existing presence. RSS has more than a decade of experience, an in-depth understanding of the market and currently employs 45 people. The current management team remains in position to ensure continued success as part of Bombardier's global Rail Control Solutions Business.

Peter Cedervall, President, Rail Control Solutions Division, Bombardier Transportation, said: "Combining the world class skills of both companies will drive further growth of our signalling activities in Australia, which is a home market for Bombardier."

Stewart Bracken and Martin Scanlon, Directors RSS, added: "RSS is pleased to become an integral part of Bombardier. Bringing together Bombardier's global and RSS' local expertise will provide the Australian market with advanced, innovative and cost effective rail signalling solutions for all levels of complexity."

Bombardier Transportation's Rail Control Solutions portfolio covers the whole range of BOMBARDIER CITYFLO mass transit solutions, from manual to fully automatic, as well as communications-based systems. It provides BOMBARDIER INTERFLO mainline solutions, from conventional to ERTMS Level 2 systems and beyond. Bombardier also provides a complete palette of wayside and onboard signalling products.



Bombardier Celebrates 175 Years of Rail Innovation in the UK



Rail technology leader Bombardier Transportation is celebrating a landmark anniversary at its UK rolling stock manufacturing site in Derby.

Bombardier's site at Litchurch Lane in Derby is commemorating 175 years of train manufacture in the city. In an event attended by the Secretary of State for Transport, the Rt. Hon Patrick McCloughlin MP; the Mayor of Derby, Councillor Fareed Hussain; local dignitaries, key customers, suppliers and national and local media, Bombardier showcased the technologies of the past, present and future produced in Derby.

Renowned heritage locomotives designed in Derby, such as 'the Midland Compound' and 'Tornado' were reunited at the Derby site in a combined presentation of innovation featuring iconic legacy trains, as well as more



In addition, Bombardier presented its innovative BOMBARDIER AVENTRA train technology, which has been chosen for Transport for London's prestigious Crossrail rolling stock contract as announced in February. (Illustration above) Bombardier will deliver 65 nine-car trains and construct a new purpose-built depot at Old Oak Common. The deal also includes maintenance provision for the fleet of trains.

Francis Paonessa, Managing Director of Bombardier Transportation in the UK said: "With the award of the Crossrail project in the 175th year of train manufacture in Derby, we are immensely proud to continue the tradition of designing and manufacturing high performance trains for the UK."

Zero Days Delivery Time with Voith Rail Service



For decades Voith has been supporting its customers with the overhaul of gear units and thus ensured safe rail vehicle operations. A particularly convenient solution for operators is the so-called gear unit exchange model. During a planned

revision or an unscheduled repair, rail operators can have fully overhauled Voith gear units delivered in advance and install them straightaway. This service has now also been extended to Scharfenberg couplers.

In the past, operators already benefitted from the many positive aspects of the gear unit exchange model: delivery times and downtimes are avoided, because the gear units are already where they are needed. Costs can be calculated in advance, warranty periods are significantly extended and the delivered, fully overhauled gear unit complies with the latest technical standards. The used units are subsequently overhauled by Voith. Afterwards they are available as a 1:1 exchange from the gear unit exchange pool to the next customer who uses the same type of gear unit.

This service is offered for all vehicle types. Be it Stadler railcars such as the Regio Shuttle, Flirt and GTW or vehicles from Alstom and Siemens: their different Voith gear units are overhauled worldwide by a gear unit exchange pool.

The transport operator Bernmobil of the city of Bern, Switzerland, has already been won over by this concept. For 15 low-floor Combino tramcars, Voith delivered a total of 120 KEH-345 exchange gear units during 2012 and 2013.

"Thanks to the close cooperation with Voith we were able to carry out the revision of our gear units without any interruptions," stated Heinz Moser, Manager Tram at Bernmobil. "The exchange model saved us 6 to 8 weeks of downtime and a great deal of coordination work. We were in close contact with Voith about one year prior to the planned revision, which enabled all those involved to control the project optimally. After these positive experiences we would certainly choose Voith again as a service partner."

Thanks to its international setup, Voith can offer the gear unit exchange model all over the world: the workshops in America, Europe and Asia are fully equipped for overhauling all gear unit types. Through

this proximity to the customer it is ensured that the gear units are always delivered on time for the revisions



Voith will in future also offer this service for Scharfenberg couplers via such an exchange pool. Südthüringen Bahn in Meiningen, Germany, will be the first customer this year to utilize the exchange coupler model for the revision of the Scharfenberg couplers of its 32 Regio Shuttles.

Voith Turbo, a Group Division of Voith GmbH, is a specialist for intelligent drive solutions. Customers from highly diverse industries such as oil and gas, energy, mining and metal processing, ship technology, rail and commercial vehicles rely on advanced technologies from Voith Turbo.

Voith sets standards in the markets energy, oil & gas, paper, raw materials and transportation & automotive. Founded in 1867, Voith employs almost 43 000 people, generates 5.7 billion euros in sales, operates in about 50 countries around the world and is today one of the biggest family-owned companies in Europe.

Photo: The transport operator Bernmobil relies on the gear unit exchange model from Voith for the revision of the KEH-345 gear units of its low-floor tramcars.© Bernmobil

OBB Rail Cargo Group: New block train in Turkey

Since September 2013, the Rail Cargo Group has worked successfully with the Turkish shipping company BALO (Büyük Anadolu Lojistik Organizasyonlar). Now, the strategic partnership is to continue to deepen.

With the development of high-frequency long-haul intermodal connections from the Ruhr area to Turkey a backbone for a corridor is now created. This ensures the Rail Cargo Group, with its own production activities has better connectivity of Turkey to Europe. Through the cooperation with Rail Cargo Group a further step has been taken to strengthen its presence in the rapidly growing Turkish market.

Recently, the first intermodal block train ran from the Ruhr area to Turkey, with an ÖBB locomotive, which is approved both in Austria and in Germany, Hungary, Romania and Bulgaria. It went from the terminal in Duisburg on over 2,000 kilometres of track with the same locomotive throughout to Tekirdag.

Increased rail freight transport from Turkey to northern and central Europe and back

Together with BALO, rail cargo shuttles run at high frequency between Europe and the Bosphorus.

"With this strategic partnership, we are taking an important step in a market that has great potential for development of Rail Cargo Group. We want to offer an attractive product with high departure frequencies, good quality and competitive prices, so that the Asian region of Turkey is also optimally connected by rail, "says Erik Excited, CEO of Rail Cargo Group.

"The Rail Cargo Group is thus a strong character and brings even more freight from road to the eco-friendly rail," says Excited. "For the first time we have succeeded as planned to drive their own vehicles to the Turkish border. The container shuttle runs every other day in each direction.



For customers, the train is an important bridge between Asia and Central Europe.

Due to the shorter lead times that can be achieved by the self-traction of Rail Cargo Group, the car bond is reduced and thus transports more quantity for the same car inventory. Here, the train is first performed on Austrian territory up to the Turkish border with a ÖBB Taurus high-performance locomotive of 1116 in the rotation.

Enormous freight potential

Turkey has set itself the goal by 2023 to triple the volume of exports. For the train, with a current rail share of only 0.85%, this is an important role to play, because the Turkish government has lobbied strongly for the establishment of a functioning rail link. Together with its Turkish partner BALO, the Rail Cargo Group has focused for some time on intermodal transport, with high-traffic shuttle services offered and as the rail freight transportation from Turkey to northern and central Europe and back is further strengthened.



ÖBB: New advertising campaign "Just RAILaxed"

Train travel is convenient, hassle free and gives the customer one of the most precious things in our lives back: precious time. You can use the time on the train for things that would not be possible in the car. You can sleep, for example, read or relax drink coffee, or you can concentrate on work or chat with loved ones.

The train roars in all weather at up to 230 km/h. In short, train travel is "Simply RAILaxed". This is exactly the motto the new ÖBB advertising campaign for a specially stamp was created as a hallmark of stress-free and relaxed travel by train.

The campaign is accompanied by a TV commercial with accompanying song, print advertisements, online advertising and promotions and runs across Austria until 22 June 2014.

ÖBB Head of Communications Kristin Hanusch-Linser: "The new luxury is time which is good for us, because the train gives us a good bit of it back, and we use this theme with the campaign.

Right: A sample poster appearing in Austria ©OBB.



Jetzt kommt Bewegung rein



Voith and the Fraunhofer Institute present lightweight construction and manufacturing concept for a high speed train

How much weight can be saved in a train with alternative materials and manufacturing processes without negative impacts on its producibility? How the traction unit of such a weight-optimized high speed train might look is shown by Voith and the Fraunhofer Institut für Werkzeugmaschinen und Umformtechnik (IWU) in a study that was presented at the Chemnitz Trade Fair. The conceptual model assumes weight savings of up to 20 percent compared to standard vehicle designs.

"We have worked for years with our customers in the automotive and rail vehicle industry on solutions for designing components and vehicles that are lighter and thus more efficient," says Jens Pohl, CEO of Voith Engineering Services. "With this project, we had the rare opportunity to be proactive and work together with our project partners on alternative designs for a light high speed train."

The innovation and research project
was supported as part of the European
Regional Development fund (ERDF) and
with funds from the Free State of Saxony.
It was important to the Voith engineers
to study the entire process chain, from
design to construction and calculation
to the manufacturing processes. The
group of project partners was rounded
out by MFPA Leipzig, responsible for
material characterization, and KUKA Systems, which
provided the expertise for forming technology and the
corresponding tool design construction.

When selecting the materials, the manufacturing advantages of fibreglass and aluminium foam are combined. The forward bow nose of the 6.80 m long model is made from GFRP, a material which is often used today. However, the engineers have taken a new tack in the traction unit. There, they work with aluminum foam in a sandwich construction. Along with weight advantages, this procedure also has the

necessary properties with regard to stiffness and temperature resistance.

"We reacted primarily to the wishes of our Asian customers from China and Taiwan. They particularly want simple solutions which do not later lead to high costs and processes which are difficult to control in production," explains Frank Salzwedel, who is responsible for rail vehicle development at Voith Engineering Services.

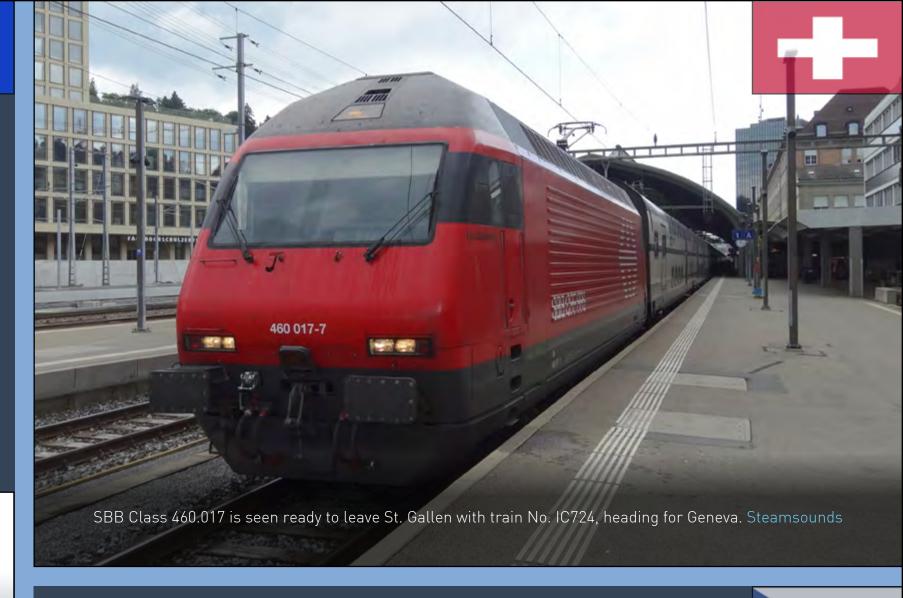
The experts of Fraunhofer IWU were responsible for the technology and tool development of the foam within the project. "We decided on aluminum foam as material, because with the sandwich structure we can achieve weight savings of 20 percent compared to conventional manufacturing with GFRP or aluminum – with the same stiffness," explains Dr. Thomas Hipke, Head of the Department Composite Design at the Fraunhofer IWU.

One special challenge was in the development of a suitable technology for forming.



Until now, it was not possible to form the material economically and in accordance with the needs of the target industry.

The solution: The scientists decided to use embossing tools instead of conventional deep drawing. The final contour is set during the foaming process. "As a result, we have not only developed an economical process for forming the aluminium foam," says Dr. Hipke. "We also save approximately 60 percent on tool costs."



CZ LOKO has submitted locomotive No. T448p-116 to representatives of DB Schenker Rail Polska

The locomotive has undergone major repairs at the Czech CZ LOKO factory in Ceske Trebové.

DB Schenker Rail Polska SA is the youngest member of DB Schenker Rail. The company provides freight services in Poland, especially in the transportation segment coal, chemicals and building materials.

Poland is the second largest rail market in the EU and plays an important role in the development of rail transport in Europe.

CZ LOKO Poland is one of the leading suppliers of spare parts and repairs of interchangeable units to Czech locomotives in the locomotive fleet from DB Schenker Rail Polska.

"For DB Schenker Poland, this is CZ LOKO's first experience with the Czech repairer" said Martin Švercl export manager for Poland. So far, all locomotive repairs have been carried out only in their own depots.































