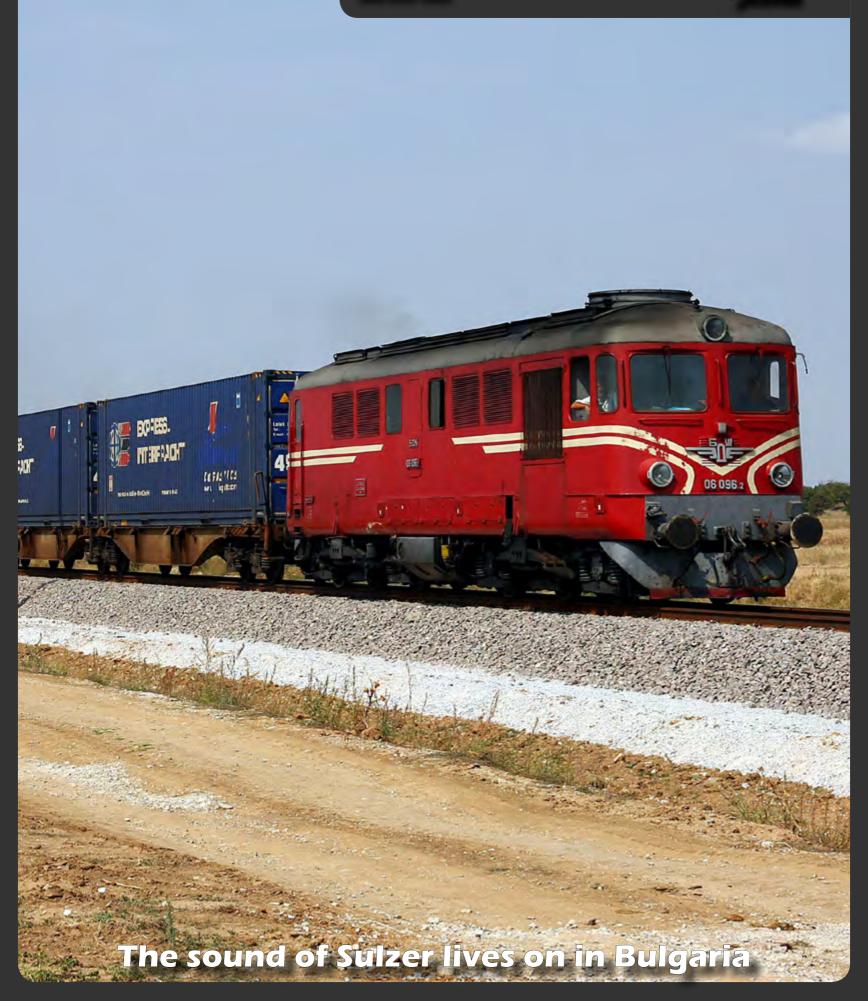
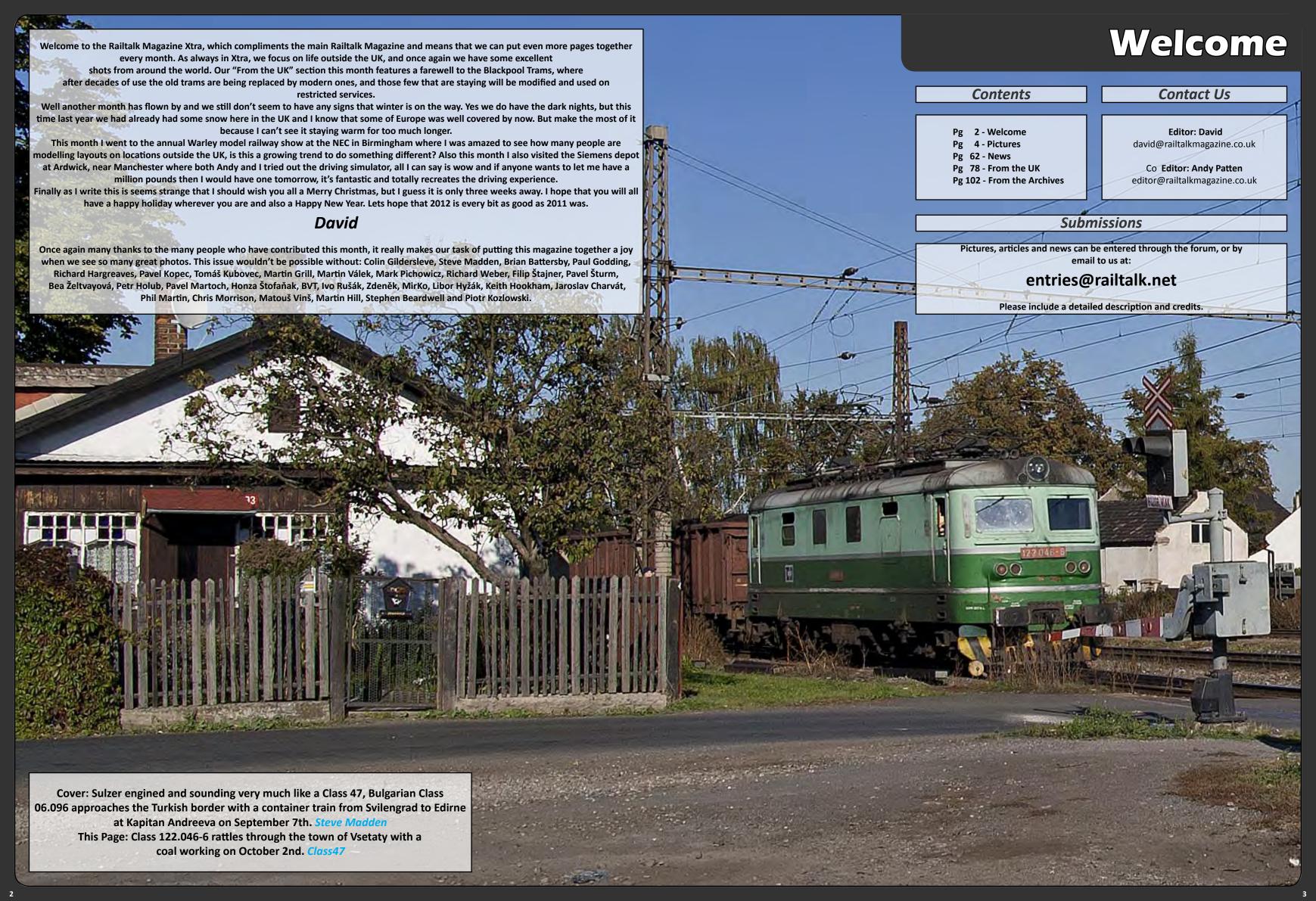
# Ralltalk Issue 63x December 2011 Magazine

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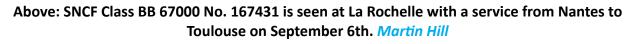












Below: SNCF ter No. 73809 single car unit is seen at La Rochelle on September 6th. Martin Hill





Above: Bombardier Traxx locos Nos. 2824 and 2823 head through Antwerp Berchem. *Brian Battersby*Below: The locomotives of class 143/243 still belong to the most successful class of German
electric locomotives, with numbers built exceeding 630. This is DB Class 143.647-6,
seen at Trier on August 11th. *Brian Battersby* 







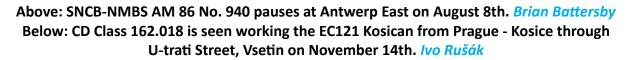
Above: Railion Class 185.179-9 heads another Class 185 through Neuwied on August 12th with a lengthy rake of wagons. *Brian Battersby*Below: Unique liveried CD "City Frog" Class 451.025 and 451.026 head into

Praha Vrsovice. *Paul Godding* 















Above: Built in the 1970s for "semi-direct" traffic over longer distances, AM75 EMU No. 842 is seen arriving into Antwerp Berchem on August 8th. Brian Battersby

Below: NMBS-SNCB Class 96 EMU No. 996 is seen at Brugge on August 6th. Brian Battersby











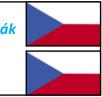








Above: CD Class 460.073 passes U-Trati Street, Vsetin with Os3208 Horni-Lidec - Prerov. *Ivo Rušák*Below: Class 162.014-5 heads the EC121 Kosican from Prague - Kosice through Vsetin
on November 3rd. *Ivo Rušák* 





































#### VOSSLOH WILL SUPPLY 31 VEHICLES FOR THE NEW WUPPERTAL SUSPENSION MONORAIL

Thanks to the successful cooperation between Vossloh España and Vossloh Kiepe, a contract has been signed to manufacture the new vehicles for the renovated suspension railcars in the German city of Wuppertal.

A total of 31 vehicles will be delivered to replace the previous ones which date back to the Seventies, the contract is for an amount of 122 million euros. Delivery of the first vehicle is planned mid 2014. Subsequently, two to three vehicles will be delivered to Wuppertal every month. Delivery of the final vehicle is scheduled for December 2015.

Vossloh Kiepe part of the Vossloh Group, will be supplying the next series of this type of transport. The Dusseldorf based company is specialized in the electrical equipment of vehicles for urban transport.

Vossloh España, at its technology center in Albuixech (Valencia), will be responsible for manufacturing the bogies, the body shells fittings and the standard tests of the vehicles.

The cooperation of the two divisions of Vossloh has also contributed to get contracts from the cities of Karlsruhe and Rostock as well al from the Spanish León and Gijón.

The historical suspension railcar of Wuppertal, which was inaugurated on March 1st 1901, is the oldest monorail in the world still in service. It covers a line of almost 14 kilometres in 30 minutes at an average height of 10 metres above the River Wupper. Both its structure and its vehicles are currently in the process of being completely modernized. Almost 25 million passengers use this type of transport every year.

### Urban transport cooperation agreement with the city of Saint Petersburg

Alstom and its strategic partner in Russia, Transmashholding (TMH), have signed a Memorandum of Understanding with the city of Saint Petersburg which establishes a programme of cooperation for the development of a modern tramway network. The agreement was signed by Georgiy Poltavchenko, the Governor of Saint Petersburg, Andrey Bokarev, CEO of TMH, et Henri Poupart-Lafarge, President of Alstom Transport.

Under the terms of this agreement, Alstom and TMH undertake to develop together a new model of express tramway, fitted with a low floor throughout, entirely modular and adapted to the climatic conditions of the region to meet the needs of the city of Saint Petersburg.

Under the agreement's framework, Alstom and TMH would also be providing the city with consulting services for questions related to the organisation of urban transport networks, project management and the optimisation of passenger flows. The partners would also bring their expertise for supplying electricity for the network, building infrastructure and signalling. The agreement provides for the constitution of a tripartite work group for these questions.

Design and engineering, production, assembly and maintenance activities would all be concentrated in Saint Petersburg at the tramway competence centre which Alstom and TMH would be establishing at the Oevrz site. The factory currently employs 1,000 people who work on the maintenance and renovation of rolling stock.

Alstom will be bringing its technological know-how in the tramway field to the partnership. More than 1,500 units of the Alstom Group's flagship model, Citadis, have been sold in nearly 40 countries, and this tramway has covered more than 245 million kms and transported over 4 billion passengers since its first entry into service 11 years ago. Today one low floor tramway out of three in the world has been built by Alstom.

# Bombardier Names New TRAXX Multi Engine Locomotive as its Top Innovation of 2011

Bombardier, the world's leading rail technology innovator, has announced the next generation BOMBARDIER TRAXX diesel electric multi-engine locomotive as its top technology solution of the year. The concept was selected from a strong field of innovations at the company's 2011 Bombardier Transportation Innovation Awards. Criteria in judging the innovations included feasibility, risk, competitive advantage and environmental impact.

The new locomotive has already proven to be a game changer in the European railway market, contributing to Bombardier signing a nine-year frame contract with DB Regio AG for 200 TRAXX locomotives, in April 2011. The novel concept, which fulfils the latest emission norms, is based on four diesel-electric engine-generator sets replacing the typical large unit. The concept also allows the implementation of an intelligent engine control system, allowing each engine to be operated independently to maximise fuel efficiency.

"The new TRAXX diesel locomotive is the latest in a long line of innovative technologies developed by Bombardier," said André Navarri, President and Chief Operating Officer, Bombardier Transportation. "As the world's leading rail and public mobility solutions company, Bombardier is constantly developing the sustainable transport solutions of tomorrow. This impressive new locomotive concept allows high flexibility in fulfilling future emission requirements and upgrades as well as reducing fuel consumption, thus giving it strong potential in the markets of Europe and beyond."

The 2011 Innovation Award was judged by a network of Innovation Managers at Bombardier creating a shortlist from which Mr. Navarri and Josef Doppelbauer, Vice President Project Management and Chief Technical Officer, Bombardier Transportation, selected the winner. Dr. Doppelbauer and Martin Ertl, Chief Innovation Officer, Bombardier Transportation, presented the award to the team behind the winning concept: Karlheinz Geradts, Andreas Degenhardt, Thomas Werle and Werner Sonnleitner. "There was a strong field of entries for this year's Innovation Awards," Dr. Doppelbauer said. "This strength in depth bears witness to Bombardier's cutting edge product development and thought leadership on sustainable mobility. All the innovations shortlisted for this award are worthy winners."

The innovations shortlisted for this year's award also included Bombardier's Last Mile Diesel and Last Mile Battery technology. It removes the need to change/add locomotives in shunting areas of a rail network, which are typically not electrified. The compact 240kW diesel generator set enables electric mainline locomotives to operate on non-electrified lines for certain periods, offering operators increased flexibility, for example, at terminals, ports or construction sites. The Last Mile Battery is a new system that feeds an electric mainline locomotive with an onboard battery pack.

Another highly commended innovation was Bombardier's latest carbody concept developed in its role as partner and supplier of Siemens in the major Deutsche Bahn project ICx for the next generation of high speed trains in Germany. It delivers a 15 per cent weight reduction of the carbody sidewalls compared to standard designs, ensuring excellent surface quality and reducing the risk of corrosion while using standard materials preferred by customers.

Innovation management and product development are at the core of Bombardier's approach to shaping the future of public transportation. A specialist network of Centres of Excellence (CoEs) is continually developing its range of products from signalling technologies to BOMBARDIER PrimoveCity inductive e-mobility solutions offering easy urban transportation for all modes of electric vehicles, including trams, buses, commercial vehicles and cars.

These CoEs are supported by dedicated engineering centres across Europe and North America, specialising in expert technical areas from acoustics and aerodynamics to reliability, availability and maintainability.

## Bombardier Receives Order from Maryland Transit Administration for 54 MultiLevel Commuter Rail Vehicles

MTA becomes third transit system in North America to order these innovative passenger rail cars

Bombardier Transportation has announced that it has received an order for 54 MultiLevel commuter rail vehicles from the Maryland Transit Administration (MTA). The order is valued at approximately \$154 million US (112 million euro).

MTA is the third transit system in North America to order these innovative passenger rail cars. Bombardier has provided 329 MultiLevel vehicles to the New Jersey Transit Corporation (NJ TRANSIT) and 160 of the same type of cars to the Agence Metropolitaine de Transport of Montréal. Last year, Bombardier received a contract from NJ TRANSIT for 100 additional MultiLevel vehicles with options for up to 79 additional cars. With this new order, MTA is exercising contract options that have been assigned to MTA by NJ TRANSIT.

The new cars for MTA will run on the Maryland Area Regional Commuter (MARC) Train Service's Brunswick, Camden and Penn Lines. The vehicles will both replace older cars that will be retired, and expand the MARC fleet. Deliveries are scheduled to take place between May and December 2013.

"Bombardier is partnering with MTA to offer Maryland commuters innovative, reliable, safe and comfortable MultiLevel vehicles that will further improve public transportation by making it even more passenger, operator and environmentally friendly," said Raymond Bachant, President, Bombardier Transportation, North America.

The MultiLevel vehicles feature upper and lower seating levels as well as a spacious intermediate level at each end of the car — making them truly "multi-level" — and offer high levels of capacity, comfort and convenience. Each coach has 15 to 30 per cent more seating capacity then a typical single-level car, yet is specially designed to meet the infrastructure constraints of certain rail networks, such as those posed by tunnels.

Comfort features include a two-by-two seating configuration that eliminates the middle seat found on many single-level vehicles, specially designed seats with improved lumbar support, and more leg room, knee room and seat width than found in conventional coaches. Large side doors located at the intermediate level provide accessibility from both high and low level platforms.

The vehicles also offer state-of-the-art technical features including an automated public address system, LED destination screens, and external public address speakers to keep passengers informed, whether on the train or on the platform; an advanced heating, ventilation and air conditioning system; microprocessor controlled door systems; and a monitoring system that instantly diagnoses and displays the status of all major train systems. In addition, the MultiLevel vehicles can be adapted for commuter, regional, or intercity use.

MTA is a division of the Maryland Department of Transportation and one of the largest multi-modal transit systems in the United States. Recently, Bombardier refurbished 34 single-level commuter coaches for MTA. Prior to that, Bombardier was a member of the consortium that supplied MTA with six electric locomotives.



### Alstom builds on its leading position in high-speed and very high-speed rail transport

On 30 November, Alstom unveiled the latest high-speed Pendolino trains at its Savigliano plant in Italy, due to be delivered to UK rail operator Virgin Trains in the next few weeks. The company also took the wraps off its first very high-speed AGV.italo trains, soon to be delivered to new Italian rail operator Nuovo Trasporto Viaggiatori (NTV).

Virgin Trains has been running services on Britain's West Coast Main Line since 1997 and has come to set the standard among train companies in the private sector. NTV is preparing to launch its services in Italy



following recent deregulation and is Europe's first privately owned operator of very high-speed trains. The two companies both chose Alstom as their industrial and technical partner to launch train services in their domestic market.

Virgin Trains currently operates 53 Pendolino trains in the UK, designed and built by Alstom at its Savigliano site and maintained through its UK service centres. In 2012, three new trains and 62 more carriages will be added to the Virgin fleet. The fleet has covered 175 million kilometres to date and last year carried over 28 million passengers, twice as many as seven years ago.

NTV placed an order with Alstom for 25 brand new very high-speed AGV trains in 2008, which are due to enter service in early 2012 on the Turin-Salerno route (via Rome and Naples) and Venice-Rome line. The order involves a number of Alstom Transport manufacturing sites, with 17 trains built at the La Rochelle site in France and eight being manufactured in Savigliano. Elsewhere in Italy, the Bologna site—which specialises in signalling—is handling ERTMS/SMCT and the Sesto San Giovanni plant, near Milan, is providing traction systems.

At the presentation of the new trains, Henri Poupart-Lafarge, President of Alstom Transport, accompanied by Tony Collins, CEO Virgin Trains, and Giuseppe Sciarrone, MD NTV, recalled the experience that Alstom has gained through 30 years in the sector of high and very high-speed trains. « The unique position that Alstom holds on the global market is a result of its product offering, which is the most complete, ( articulated and non-articulated trains, tilting rains, single and double-deck), as well as the knowledge of different markets and the needs of our customers and also the capacity, thanks to our local presence, to provide maintenance of our trains during their whole life cycle », he said.

Giuseppe Sciarrone emphasized « the huge innovation which is the introduction of competition on the very high-speed network and the challenge of a new train. The experience of NTV, now ready for commercial service, is awaited with great interest and will be studied carefully in other countries. Meeting such a challenge in such a short time frame would not have been possible without the enormous experience in high speed and the technological reliability of Alstom, who has produced these ultra modern trains."

Tony Collins added: « Our customer service success at Virgin Trains over the last 14 years has been heavily dependent on the relationship with our key partners. Alstom has consistently gone beyond the call of duty to help us achieve the performance that has attracted record customer numbers and customer satisfaction scores. We are grateful for that support and partnership. The additional Pendolino trains and carriages will enable us to add thousands of extra seats to our services which is great news for passengers, who love the Pendolino".

With sales of €5.6 billion in 2010-2011 and a workforce of 25,000 people, Alstom Transport is the world's leading name in high-speed and very high-speed train solutions. Alstom is also the number one exporter of high-speed and very high-speed technology worldwide, having sold more than 550 very high-speed trains (TGV and AGV) and over 450 Pendolino trains around the globe. Alstom has supplied more trains operating at speeds of over 300 kph than any competitor on any continent, with 560 trains running in nine countries. Morocco is the most recent country to have chosen the TGV, ordering 14 Duplex trainsets in late 2010. High-speed Pendolino tilting trains operate in eleven countries—Italy, China, Germany, Spain, Finland, Portugal, Czech Republic, UK, Russia, Slovenia and Switzerland—and were recently ordered by Poland.

### Alstom to supply an additional 20 Coradia Nordic regional trains to Skånetrafiken



Skånetrafiken, the Swedish operator, signed a new contract with Alstom to supply 20 Coradia Nordic regional trains for a total of over 100 million euros. The delivery is scheduled for 2013-2014. The new trains will serve the lines in the Skåne region, in the south of Sweden.

The Coradia Nordic offers a maximum of 235 seats and can reach a speed of 160 km/h. It is designed to meet passengers' requirements in respect of comfort, accessibility and ease of movement on board in particular due to lower floors and the absence of steps. The Coradia Nordic is also a part of Alstom's environmental protection strategy: it is 95% recyclable and its distributed power optimizes the braking and acceleration of each carriage, which decreases energy consumption.

In December 2006, Skånetrafiken had ordered 69
Coradia Nordic trains from Alstom. To date, Alstom
has delivered 32 trains to the operator. "Our regional
trains are very appreciated by the passengers and it
is with pride that we receive an additional order of
20 Coradia Nordic trains from Skånetrafiken. With this
order Alstom confirms its position as the leading
supplier of regional trains in Sweden. We will now
further develop our offer within service and
maintenance for the Nordic market," says Lars Kleppe,
Managing Director Alstom Transport.

Besides Skånetrafiken, other operators such as Östgötatrafiken, Jönköpings lokaltrafik, Norrtåg, Västtrafik and SL have also ordered Alstom's Coradia Nordic regional trains. In total, Alstom has sold 193 Coradia Nordic units in Sweden since 2002.



### Railway station Prague Libeň now equipped with the latest signalling installation



A new station interlocking equipment in the railway station Prague Libeň has been put into test operation. It is the electronic interlocking ESA-33 (AŽD Praha) which is to replace the obsolete relay signalling installation AŽD-71 dating from the early 70's of the past century. The installation of the new modern signalling equipment is part of the construction "Thoroughfare in the railway junction Prague – modernization of the track section Prague Libeň - Prague Běchovice 1st part (including 2nd part)"

The installation will be run from the Unified Control Place which is situated in the reconstructed railway office at the central interlocking unit. 125 switches will be connected to this new installation. All track circuits are of KOA-1 type and fully interoperable. It means there will be no limitations to the operation of any traction vehicle of all member states of the European Union.

The station tracks are equipped with the transmitter of the automatic train control to the locomotive. Also included is the graphic-technological supplement providing train numbers and the traffic diary. The activation of the new station interlocking equipment in the station Prague Libeň significantly contributes to enhancing the capacity of the rail transport in the Prague railway junction and is a logical follow-up to the completed construction "New Link", thus creating a complex which ensures a faster and higher-quality railway connection of the capital with the eastern regions of the republic.

The essential parts of the project have been developed by IKP Consulting Engineers, s.r.o and the project documentation by AŽD Praha, s.r.o. The investor of the construction is the Railway Infrastructure Administration, state organization

### Opening of Bahnhof Melk after two years of reconstruction

#### Melk on one of the main rail connections in Europe

In 1858 the first train passed through Melk - a lot has changed since then. Today, together with Trans-European Networks (TENs), high-level infrastructure in Europe and to strengthen the economy. With the expansion of these networks of people and goods should be secured within the EU. This priority axis are set to be implemented as a priority.

Bahnhof Melk is part of a major European railway axis Paris, Strasbourg, Stuttgart, Munich and Vienna to Bratislava. Using the economic recovery programs of the EU, the Austrian Federal Government could begin the reconstruction in 2009. Prerequisite for the expansion of the Trans-European network are consistent, so-called "interoperable" railway systems. This is different infrastructure conditions (eg different train protection and energy supply systems), to unify, so the train ride is even more attractive.

#### One project - multiple benefits

Together with the EU, the province of Lower Austria and the city's extensive project could be realized from the ÖBB. The station building was converted into a modern transport station and designed the entire new station forecourt. Due to the improvement of interchanges of bus, car or bike on the train, the mobility chain was considerably shortened. From the optimization of the underpass Prinzlstraße by a second lane and adding a sidewalk to benefit motorists and pedestrians. More security could have been achieved through the dismantling of the railway crossing in St. James Street, which has been replaced by the underpass near-by "in the shoots". The quality of life of local residents has been targeted by mitigation measures on both sides of the train increases. The view from the platform to the listed station building and a World Heritage Melk was accentuated by transparent noise protection elements.

The two new continuous line tracks the effect that operationally eliminated shunting in the station area and the maintenance can be kept at a minimum level. Raising the speed to 110 km / h allows also an acceleration of travel times.

#### Redevelopment of the station building

The listed station building was completely renovated: the facade was rebuilt, installed new windows and doors and arranged the space. There are new seating in the waiting room, an occupied people cash for sales and advice available, and an accessible toilet facility. Construction personnel access and platforms. A modern and well-lit pedestrian passage, whose orange-red glass walls were artistically replaced the steel bridge overpass built in 1916 and connects the northern and southern side of town or the two platforms with two lifts and stairs. The platforms were extended and roofed, the platform 1 with a red and a Wartekoje support rails fitted. The increase of the platform edges to 55 inches allows for easy entry and exit,.

#### Redevelopment of the station forecourt

The north side train station forecourt was fully redesigned. The four covered bus stops were built and equipped with information columns and waiting berths. In addition, five parking spaces were provided for taxis. West of the station building Disabled parking spaces are located, and situated outside the station building, a sculpture.

#### Realignment of two track rails

A total of eight existing tracks and the associated switches were removed. Instead, a new route for the two new running lines was constructed. This required the overhead line equipment to be replaced. In addition, the security and telecommunications systems were adapted to the cutting edge of technology.

Photo ©: ÖBB



## Modernization of the line Votice – Benešov u Prahy

Launch of the operation on the section of the tunnel line relocation between the railway stations Votice and Olbramovice

Two new railway tunnels Olbramovický and Votický were put into operation on a festive occasion – on a modernized section of IV Railway Transit Corridor. Also, the odd set of tracks in the railway station Olbramovice, the new signalling installation in Olbramovice and Votice including the automatic block on the track section Votice – Olbramovice are already operating. The investor of this construction is the Railway Infrastructure Administration (SŽDC), state organization. Ing. Pavel Habarta, MBA, Executive Director commented on the festive occasion: "As a result of the line relocation, the distance was shortened by 122 metres and after the completion of the whole construction Modernization of the line Votice - Benešov u Prahy, the current line speed of 100 km/h will be enhanced to 150 km/h for standard sets and to 160 km/h for tilting boxes."

Main tunnel work on the remaining three tunnels on the relocation - in Zahradnický, Tomický and Tomickým II – is completed and the work focuses on the suspensions for the overhead contact line, the installation of the signalling equipment components as well as on the installation of the tunnel lighting. The work on the piercing and excavation of tunnels and on the supporting structures was executed 24/7. The redundant soil from the construction of the tunnels – one is excavated and four are pierced – was deposited on the waste disposal area Heřmanička into the future embankment within the scope of the follow-up construction of the railway corridor. In addition to the tunnels, completely new bridge structures were built as part of the line relocation.





The funds were granted by the State Fund for Transport Infrastructure. Simultaneously, co-funding of this project by the European Union under the Operational Programme Transport was requested. The planned contribution from the Cohesion Fund amounts to CZK 4,085,845,894. The request for the subsidy was endorsed by the Ministry of Transport CR in November 2009; the approval process is currently proceeding at the level of the European Commission.

The investment costs total CZK 6,756,893,000. National sources: CZK 2,671,047,106.

### Alstom unveils the Amsterdam metro

Leon Linders, President of Alstom Netherlands, unveiled the first trainset of the Amsterdam metro at Alstom's site in Valenciennes (Nord), where it was designed and manufactured. Representatives of the city of Amsterdam and the Dutch operator GVB were on hand for the event. The trainset is currently undergoing trials at Alstom's Valenciennes site and at the Valenciennes Rail Testing Centre. It will be delivered next February and is due to enter commercial service in autumn 2012. All the trainsets will operate on the metro lines in Amsterdam.

In February 2010, the city of Amsterdam (Netherlands) placed a €200 million order with Alstom Transport for 23 metro trainsets. The contract includes an option for additional metro trainsets for the future North/South line that is currently under construction.

The Amsterdam metro will consist of trainsets from Alstom's Métropolis range. Its large doors, visual management of their opening/closing thanks to LED lights, height ceiling superior to the standard (2,30 m vs 2,10 m), platform-height

floor, wide seats and gangways will make access and moving around on board much easier. Enhanced interior design providing more natural light, 100% lighting in LED technology and dynamic travel information displays will improve passengers' safety and comfort. The extended length of the new trainsets (116 m) means capacity will be increased by approximately 50%.

Alstom relied on its expertise in metros to execute this contract. Besides Valenciennes, Alstom sites of Le Creusot, Villeurbanne (France), Charleroi (Belgium), Sesto (Italy), Katowice (Poland) and Montreal (Canada) also contribute to the project execution.

One out of every four metros currently in service worldwide was supplied by Alstom.

Over 4,000 cars from the Métropolis range run on the metro networks in Barcelona, Budapest, Istanbul, Warsaw, Singapore, Shanghai, Nanjing, Buenos Aires, Santiago de Chile and Santo Domingo.



# CD Cargo appreciated four employees for outstanding deeds



Chairman Gustav Slamečka has personally praised the quartet CD Cargo employees for their extraordinary deeds. During the year, is to prevent possible accidents on the railways, which without their poised reaction almost certainly ended in tragedy.

L'udovít Busek, Marian Cervenak, Vladislav Sadilek and Miloslav Zapletal were awarded at the Prague office of CD Cargo. In addition to commemorative documents and small gifts waiting for them a personal thank you from the management company. "At a time when the pages of newspapers and television news performs minute daily information about the growing human ruthlessness and disregard, the more you appreciate those moments when I learn about the behavior completely opposite," said the awards chairman Gustav Slamečka.

"The reference staff I have on my own behalf but on behalf of the company's CD Cargo, thank them for their presence of mind and readiness shown by their actions. I am honored to have such employees in the company and very happy I personally knew. No thanks can be large enough for such acts," said Slamečka.

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# Mnichovice after reconstruction one of the prettiest train stops

The reconstruction of the train stop Mnichovice represents the completion of joint efforts of SŽDC, the town of Mnichovice and the Czech Railways, joint-stock company. The Building and Housing Economy District of the Regional Infrastructure Administration Prague repaired the facade on the building of the train stop; indoors the ceilings were lowered and insulated, the wooden lower ceiling was renovated and the doors were replaced. The sanitary facility was also modernized; it is barrier-free and provides passengers with comfort.

Neighbouring Hrusice inspired Veronika Třebická, the local interior designer to decorate the public area with Josef Lada's paintings. The area of the train stop shows the drawings of Mikeš-Tomcat or Pašík-Piggy and other Lada's figures that were depicted by the students of the local school in the subway under the track facility.

The operation and the maintenance of the sanitary facility will be taken care of by

Mnichovice for the duration of 10 years. It purchased a camera surveillance system at its own expense to ensure order and safety. There still remains one task to be resolved and it involves a car park for travellers who are brought to the train stop in cars.

The town of Mnichovice intends to build the car park in cooperation with SŽDC with the contribution of the European subsidies.



## Elf will be the first to Warmia and Mazury

On November 7th in the Marshal's Office in Olsztyn, agreement was signed between PESA Bydgoszcz SA, a local government of the Warmia and Mazury to supply electric trainset triune Elf.

This is the first in the region as a modern, air-conditioned, electric low-floor unit, and the first in the family PESY Elves ternary vehicle.

Signatures of the contact made on behalf of the Marshal's Office: Jaroslaw Straw - Deputy Speaker of the region and Victor Wojcik Director of the Department of Infrastructure and Geodesy, and on behalf of PESA: Zenon Duszyński Board member and Deputy Director for Production and Technology Sebastian Kamecki.

Elf for the Warmia and Mazury area will take aboard 162 passenger seating positions (total 324), will develop the operating speed of 160 km / h and, like all vehicles from this family will be built according to four scenarios. Delivery will be by the end of November 2012.



## The 700th FLIRT will run in South Tyrol

Stadler Rail has received an order for eight 6-carriage FLIRTs (Fast Light Innovative Regional Trains) from Südtiroler Transportstrukturen AG (STA). In addition, STA is ordering eight intermediate cars to increase the capacity of the FLIRTs already in service. In total, the order is worth around EUR 75 million. With this order, the number of FLIRTs sold exceeds the 700 threshold. Stadler has now sold 115 trains in Italy.

The transport department of the South Tyrol provincial administration purchased eight FLIRTs in 2008 via STA, as well as 12 diesel-powered articulated multiple-unit trains (GTWs) for the Vinschgerbahn, which entered service in 2005. The current order is an option from the original international tender made at the time. The trains are being purchased as part of the further modernisation of regional transport in South Tyrol. Peter Jenelten, Executive Vice President Marketing & Sales of Stadler Rail Group, is delighted, "We are proud to be able to deliver more FLIRTs to South Tyrol. This is also proof of the great success of the trains we delivered previously to Pustertal and Vinschgau."

#### **Comfortable and spacious**

The new trains for South Tyrol are essentially the same as those delivered in 2008. They are similar to those for TILO, which SBB bought for the regional service Ticino—Italy, i.e. the trains are equipped as dual-voltage multiple-unit trains (3 kV DC for Italy, 15 kV AC for Austria), and are thus able to provide connections across national borders. Based on new findings, the interior will be further improved to achieve increased comfort for passengers. A new type of more comfortable seating will be installed, for example. The trains seat 260 people, have generously proportioned multifunctional compartments in the entry zones, two accessible toilets and air conditioning — and it is possible to walk from one end of the train to the other without meeting any steps. The top speed of these modern trains is 160 km/h. All eight compositions will be delivered in the second half of 2013. At the same time, the four-carriage FLIRTs delivered in 2008 will be converted into six-carriage trains using the new intermediate cars.



#### The FLIRT success story: in Italy and throughout Europe

With this order, Stadler will exceed the threshold of 100 multiple-unit trains sold in Italy (not including the TILO fleet belonging to SBB). A total of nine customers have ordered 116 trains from Stadler in the last few years. Around half of these are FLIRTs. The trains are in service in different regions throughout the entire country, from Calabria or Apulia in the south to Lombardy or South Tyrol in the North. Peter Spuhler, CEO and owner of Stadler Rail Group, is delighted by this latest success, "I am very proud that soon more than 100 of our trains will be in service in Italy. This goes to show that our innovative and reliable multiple-unit trains are very popular with the customers and passengers."

Stadler has now sold 707 FLIRTs. The first FLIRT was delivered in 2004, and in the meantime the FLIRT has been successfully sold in Switzerland, Germany, Austria, France, Norway, Italy, Poland, Algeria, Finland, Hungary, Belarus, Estonia and the Czech Republic.

# Alstom and Belgrade sign an agreement aiming to equip the Serb capital with a new rail transport system



Dragan Djilas, Mayor of the city of Belgrade, and Gian-Luca Erbacci, Alstom Transport South Europe Vice President, have signed a Memorandum of Understanding, in the presence of the President of the Republic of Serbia, and Pierre Lellouche, French foreign trade Secretary of State, concerning the construction of a new public rail transport system.

Preliminary studies will determine the full technical and operational features of the line, including the type of rolling stock designed to meet the city's transport needs. The project concerns a first line (L1) with 25 stations. Located on the southern bank of the Danube, the future « Y » shaped line would connect the central districts of the city, linking Ustanicka-Novi Merkator to Tvornicka on one branch, to Zelesnicka Stanica Novi Beograd on the other.

This agreement opens a negotiation period during which the city of Belgrade and Alstom will define the framework and conditions of cooperation in the development of the different phases of the project. Alstom's role would consist in building a transport system including infrastructure (track laying, catenaries and power supply), signalling equipment and rolling stock. At the end of the discussions, Alstom and the city of Belgrade should sign a contract which also includes the financing of the project.

The new rail transport system is part of the « Urban Master Plan of Belgrade 2021 » designed to expand and modernise the public transport network of the Serb capital. The development of Belgrade's public transport is based on this main line (L1) which will be extended into two other lines (L2 & L3).

«This agreement illustrates Alstom's active policy, with the political and financial support of the French State, to help the Serb authorities develop their transport and power infrastructures. By choosing Alstom, the global leader in urban transport solutions, the city of Belgrade will benefit on a daily basis from the similar efficient solutions already in service in such cities as Paris, Istanbul and Singapore,» said Gian-Luca Erbacci, Alstom Transport South Europe Vice President.

# Adif start renovating the electrification system between Santander and Torrelavega



ADIF has started renovation of the electrification system in the Torrelavega-Santander route, more specifically in the subsection between Torrelavega Renedo of 8.3 km. The renovation of power lines, which also include the way Reinosa-Barcena, will improve a total of 62.4 miles of the conventional line Venta de Baños, Santander, Cantabria as it passes through. Each of the sections under construction has been divided into ten subsections for operational reasons in the work, carried out in an inaccessible terrain and difficult terrain. This new phase of work begins following the completion of civil works in the first few miles between Torrelavega and Santander, with the completion of the foundation, replacing poles, brackets, compensators and porches.

These works, which are aimed at establishing the technical conditions to provide the best line the maximum safety and reliability, in July iniciarion both sections in order to prevent damage to the network and rail traffic and minimize the potential consequences thereof.

The renewal of the catenary is undertaken with two different contracts: the renovation project of the catenary on the way Reinosa-Barcena, with a budget of 9,481,695.7 euros, and the contract for modernization and airline compensation contact Torrelavega-Santander route, with a budget of 7,370,215.5 euros.

On the other hand, Adif has completed the total renovation and independent compensation of the catenary of Mataporquera-Reinosa stretch of 20 km in length, belonging to the same line

Palencia-Santander, which has invested 6.6 million euros. With these actions, Adif carry out the renovation of the catenary about 83 kilometers of track, of the 107-kilometer stretch of the Santander-Mataporquera. Of these, 88 miles belonging to the Santander commuter line Reinosa. This investment has the nature of work for the State, and is done in the Program Agreement signed between the Central Government and ADIF.



#### Torrelavega-Santander route

The journey Torrelavega-Santander, of 28.8 kilometers

long and belonging to the standard gauge railway line Santander Venta de Baños, single track, has in its journey with 18 overpasses, 12 three level crossings and underpasses, as well Sierrapando stations, Renedo, Guarnizo, Boo, Muriedas and Santander. At this time the civil work of the section is finished, and installed 62% of the 687 poles provided. On the way,

includes the installation of brackets 993, 89 and 279 compensatory anchorage. The works are scheduled to get the most performance and progress in the use of technical means used. In the part corresponding to the station can undertake Renedo wire replacement in December.

#### Reinosa-Bárcena trip

The journey Reinosa-Barcena of the same line, has certain complexities in executing the works by the terrain, the difficulty of access and the existence of 22 tunnels along the 33.6 miles of single track. The civil works phase of the journey has exceeded 70%, and have already placed more than 35% of the 997 planned posts. In this way also be placed brackets 1023, 110 compensatory, and 274 hardware tunnel before starting the installation of the contact wire and sustainer. The purpose of this action is the renovation of the overhead contact line, which covers several sections and stations Reinosa-Lantueno output Santiurde, Santiurde Lantueno station, ride Lantueno Santiurde-Pesquera Pesquera station, drive-Montabliz Fisheries, station Montabliz, Montabliz-Cobeja route, station and route Cobeja Cobeja-Barcena.

#### Specific alterations in the service

The renovation of these 62.4 km overhead rail network passing through the Autonomous Community of Cantabria are underway with implementation and management systems commonly used in the assembly of new overhead lines high speed.

This involves the use of skilled labor and the use of mechanical and highly efficient technical-train-laying, which involves also a large effort from both the winning companies as all the services involved Adif for the proper development of the performance.

All these circumstances have prompted it to cut the need for rail traffic at different times of the work to ensure good progress and increased profitability in the use of mechanical means, and to minimize any incidents motivated by the connection between points that are repaired and running.

Therefore, courts have been established rail service at night, since the beginning of the work, as well as scheduled outages on alternate weekends, with a duration of 36 hours, for which ADIF and RENFE has established a plan transpor tation alternative for travelers.











