

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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David

Welcome to Railtalk Magazine Xtra, which compliments the main Railtalk magazine and features photos and news items from around the world.

Well it is the end of another year, and what a year it has been. There have been many developments over 2014 on the railway scene with

a large number of new locos and units being delivered and several older ones being sold on to other operators. This situation seems set to continue in 2015 where it is already looking like a bumper year for variety. Of particular interest to myself so far is the dispatch of several Czech 'Goggles' and stock to Slovakia on hire, and the use of new Vectrons on Regiojet services. Also in the UK we have had the announcement that Virgin/Stagecoach are to take over the East Coast franchise, so there will probably be a good deal of paint and vinyl

ordered by the time this goes ahead.

As I write this Christmas is looming and I would like to take this opportunity to wish all our readers and contributors a very Merry

Christmas and a Happy New Year. Thank you to all the contributors in 2014 and I hope that you will all continue to send in great photos

during 2015.

Our 'From the UK' section this month features a visit to the Keighley and Worth Valley Railway for their steam gala. One of the last

events in the preserved railway calendar and now follows a quiet spell on many lines until the Spring.

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.

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, Mark Bennett, Keith Davies, Steve Dennison, Dave Felton, Front CompVids, Paul Godding, Carl Grocott, Richard Hargreaves Dave Harris, Stuart Hillis, Keith Hookham, Richard Jones, Anton Kendall, Steve Madden, Phil Martin, Lewis Mitchell, Mike Morant, Chris Morrison, Gerald Nicholl, Chris Perkins, Mark Pichowicz, Andy Pratt, Gary Smith, Laurence Sly, Railwaymedia, Steamsounds,

Steve Thompson and Mark Torkington.

Front Cover: No. 16227 passes under the impressive semaphore gantry at Jakhal Jct. with a passenger train eading towards Rewari, India on October 18th. Mark Torkington

This Page: DB's Class 140.018 passes through Ahlten with a rake of loaded car transporters. Paul Godding







































































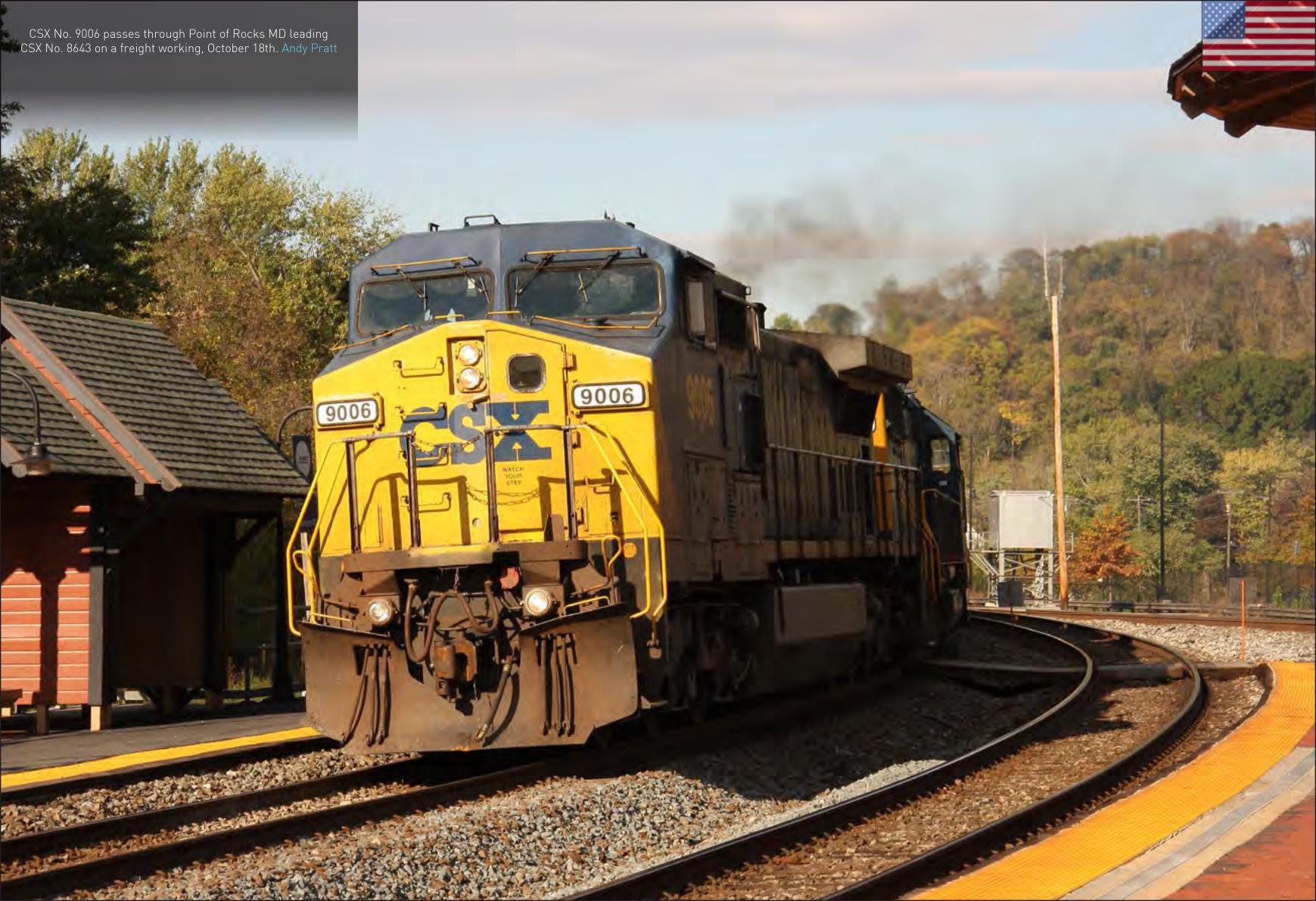


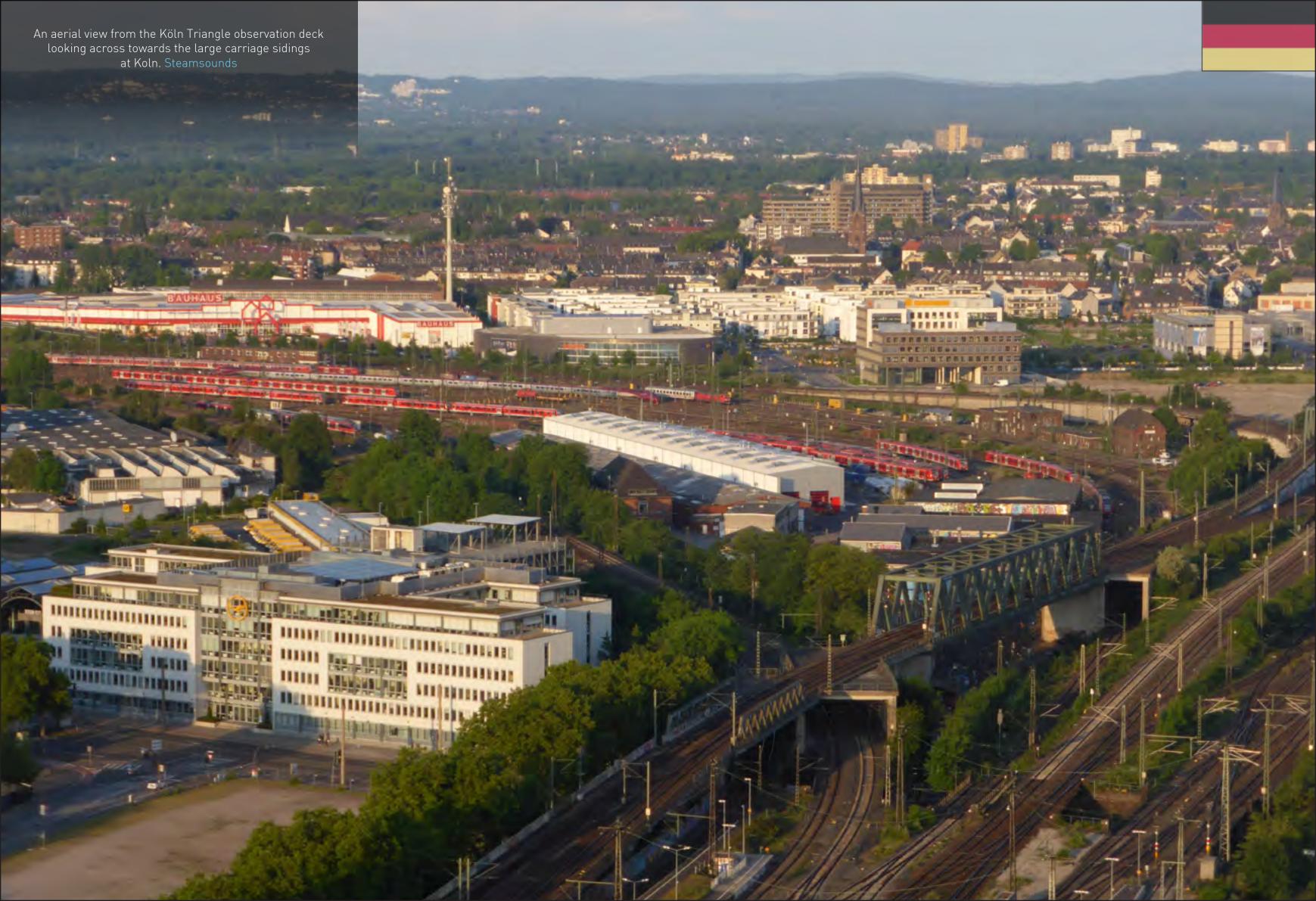
































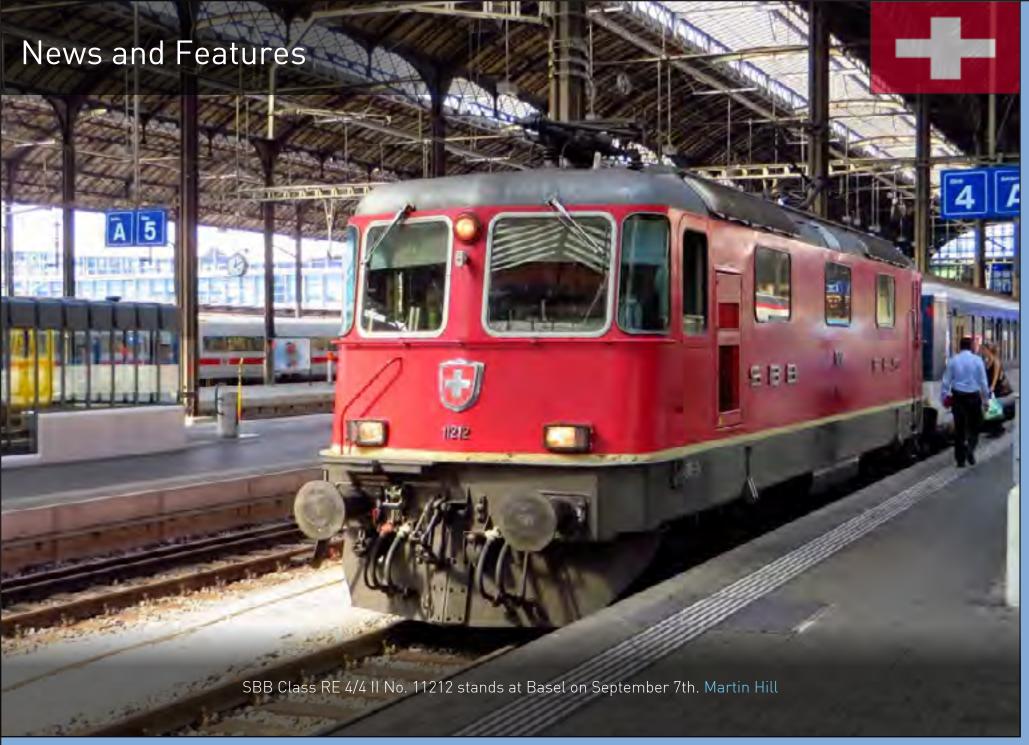












Samskip Van Dieren Multimodal extends operations with Hector Rail



Hector Rail and Samskip Van Dieren Multimodal have agreed to extend the business relationship underpinning direct rail services between Sweden and the continent. As of 1st January six round trips per week between Gothenburg in Sweden and Duisburg in the Ruhr area will be added to the existing operation of 11 round trips per week connecting Duisburg and Nässjö/Katrineholm. Both the existing and the new operations are based on the same concept, with through going locomotives connecting Germany and Sweden via the fixed link through Denmark.

Starting from January 2008, the co-operation between the companies introduced the first direct train services ever to connect Scandinavia and the continent. Samskip Van Dieren Multimodal, a wholly owned subsidiary of Samskip Multimodal BV, has developed a highly successful concept for door-to-door solutions based on intermodal loading equipment and its own complete trains. The trains can carry all kinds of containers and trailers including so called Mega-trailers.

Like all contemporary electric locomotives, those used by Hector Rail feature electric brakes which generate power that can be recovered for use by the railway network. The concept is believed to make the locomotive the most environmentally friendly land-based transport solution in the industry.

Bombardier to Deliver New Train Fleet for Gatwick Express Services

Rail technology leader Bombardier Transportation has signed a contract to deliver 27 new four-car trains for Govia Thameslink Railway (GTR), for operation on the Gatwick Express. The contract for 108 cars has a total value of approximately £145 million GBP (182 million euro, \$227 million US).

Under the contract, Bombardier will supply GTR with the latest version of the BOMBARDIER ELECTROSTAR family of electrical multiple units, with additional features for the rail-air route. These features include easier access for passengers with luggage, improved storage space, two by two seating and WiFi. The new Class 387/2 trains will be designed and manufactured at Bombardier's Derby facility.

Charles Horton, CEO of GTR and Managing Director of Southern, said, "This is great news for our Gatwick passengers, but also for those travelling from Brighton as in the off-peak season, some of these trains will be extended to there, while still maintaining the fast connection between Victoria and Gatwick."

The new order comes as GTR celebrates the arrival of another fleet of Bombardier's latest technology trains, the Class 387/1. In July 2013, Bombardier won a contract to deliver 116 new air-conditioned carriages for GTR, which are scheduled to enter service early in the next year. The new trains will improve services on the Bedford to Brighton line as they replace the 27-year old Class 319 vehicles currently in operation on that route. This latest order for 108 additional cars formed an option within the original 2013 contract.

Mr Horton added, "We took over the operation of the Thameslink route in September and we are already introducing new trains that will transform our passengers' journeys on services between Bedford and Brighton."

Rail minister Claire
Perry welcomed the
announcement that
Bombardier would be
providing the new



Gatwick Express trains, which will be built as a run on to the existing 116 carriage order, saying, "These new British built trains are great news for passengers and a boost for the economy. They will transform journeys on the Gatwick Express and Thameslink routes and safeguard jobs at Bombardier's Derby factory.

"As part of our long term economic plan over £38 billion is being invested in improving our railways over the next five years and it's great to see companies like GTR investing in the service it provides for its customers."

The ELECTROSTAR has a proven track record for reliability and environmental performance and is already in daily passenger service with other UK train operators including c2c, Southeastern, London Overground, and Stansted Express. The Gautrain railway in Johannesburg, South Africa, also operates ELECTROSTAR trains. Over 800 Bombardier trains serve London every day, supported by 700 employees on 12 sites

This is the latest in a series of contract wins and successful projects for Bombardier in London. On the Underground, Bombardier delivered the Victoria Line upgrade project on time and under budget, and is in the process of delivering new trains for the sub-surface lines, the Underground's first to feature air-conditioning and walk through gangways. In addition, Bombardier has also delivered all the new rolling stock for the London Overground service. This service is currently being extended from four to five-car trains and provides a maintenance service for those trains at Transport for London's New Cross Gate depot. Earlier this year, in the 175th year of train manufacture in the city of Derby, Bombardier received the prestigious contract to deliver a flagship fleet of 65 new trains for the London Crossrail project. These new high performance trains, derived from the latest BOMBARDIER AVENTRA product platform and customised for Crossrail, will be introduced in 2017. Bombardier will also maintain the vehicles from a new purpose-built depot at Old Oak Common.

Alstom produces the first body-shell of PRASA commuter trains for South Africa

by June 2016.

"We are glad to have achieved the important milestone of the handover of the body-shell and

thereby to have reassured the trust placed in us by PRASA. Both Gibela and Alstom teams, in South Africa, are strongly committed to delivering the trains on time and to the complete satisfaction of PRASA", says Marc Granger, CEO of Gibela.



Alstom's Lapa manufacturing plant in Brazil has timely manufactured the first complete body-shell of the twenty X'Trapolis Mega commuter trains currently under production in the site as part of its 600-trains contract with Passenger Rail Agency of South Africa (PRASA).

Seven months after the financial close of the 4 billion euro contract between Alstom and PRASA, the project is well under way, with the manufacturing proceeding smoothly and Gibela, the local joint venture, created to execute the PRASA contract, up and running.

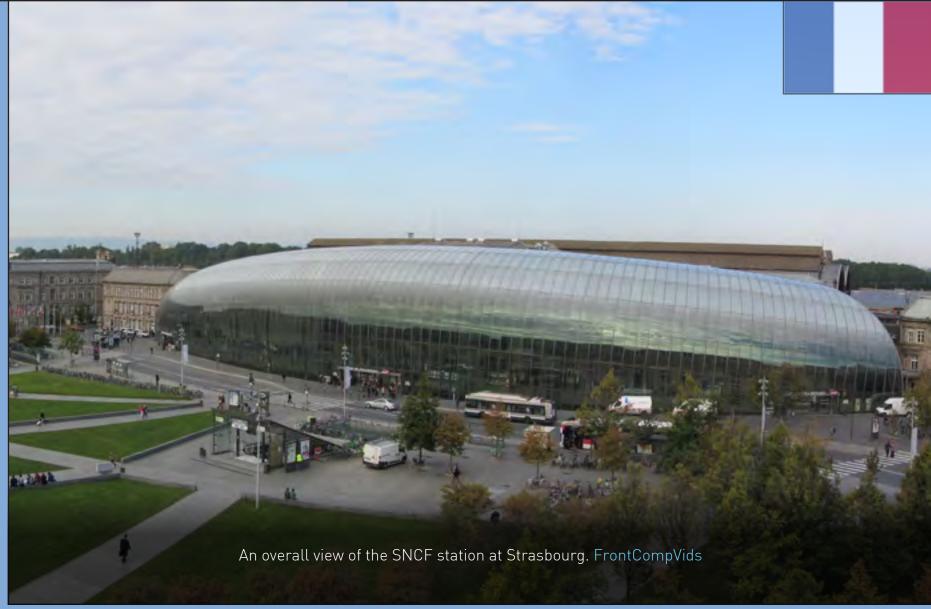
The first 20 trains are being built in Alstom plant in Lapa, Brazil to assure necessary skills training to the South African teams ahead of the opening of a purpose-built local manufacturing facility in Dunnottar. South-African commodity suppliers have been involved in the manufacturing of this first body-shell.

This first stainless steel body-shell is now ready to start the fitting phase, after which, by the end of 2015, the first complete PRASA train will be shipped to South Africa for an intensive testing program, before it can enter into revenue service

"In the months ahead this world class manufacturing activities will be performed in South Africa by our own engineers and artisans. It is in line with our plans to develop new generation of railway engineers and artisans. We are focusing our energy on the creation of a railway service that forms an integral part of the transport system renewal to provide effective and efficient public transport to all South Africans", said Piet Sebola, Group Executive: Strategic Asset Development of PRASA.

Gibela now employs 78 people and 16 South African railway engineers are almost halfway through an 18 months training programme on the trains design and technologies at several Alstom plants in Europe.

Alstom is supplying PRASA with its X'Trapolis Mega, the new X'Trapolis train developed by Alstom to fit South Africa's 1.067 m gauge. Several Alstom plants are involved in the PRASA project, among them Sesto (Italy) for the traction motors, Le Creusot (France) for the bogies, Reischoffen (France) for the driver cabin, but also the French sites of Ornans, Tarbes, Villeurbanne and Saint-Ouen.



MEXICO-TOLUCA INTERCITY RAILROAD PROJECT AWARD

The Mexican Secretariat of Communications and Transportation (SCT) has awarded the intercity railroad project, which will link Mexico City with Toluca, to the consortium lead by CAF in partnership with companies Isolux-Corsán, AZVI and Thales.

The contract is to be signed in December and amounts to circa 690M Euro (VAT excluded). Approximately 49% of this amount pertains to the CAF Group.

CAF's scope of supply comprises the rolling stock with 30 EMUs of 5 cars each. With an approximate capacity for 700 passengers, including seating areas for Persons with Reduced Mobility, the Units will feature unobstructed interiors and gangways between cars, based on a mass transit design which ensures the highest quality and safety standards.

In addition, CAF Signalling will supply the signalling and ATO systems, the control centre and the onboard ERTMS equipment. Furthermore, the building company of the CAF Group, CMFS, will deal with the electromechanical facilities

and partner with CAF Transport Engineering to carry out integration engineering and project coordination.



CAF has been involved in Mexican railroad projects since 1992 and supplied a number of Units for several Metro lines in the City of Mexico, coupled with the provision of maintenance services. In addition, the Company has supplied and operated, under a 30 year concession scheme starting in 2008, the Buenavista-Cuautitlán suburban railroad transit line in the City of Mexico D.F.

This contract builds on the Company's position as one of the leading rolling stock suppliers of the whole American continent, where in addition to the Mexican market, the Company has ongoing projects in the United States, Brazil, Colombia and Chile.

Alstom to supply Romania with Atlas 200, its ERTMS Level 2 solution

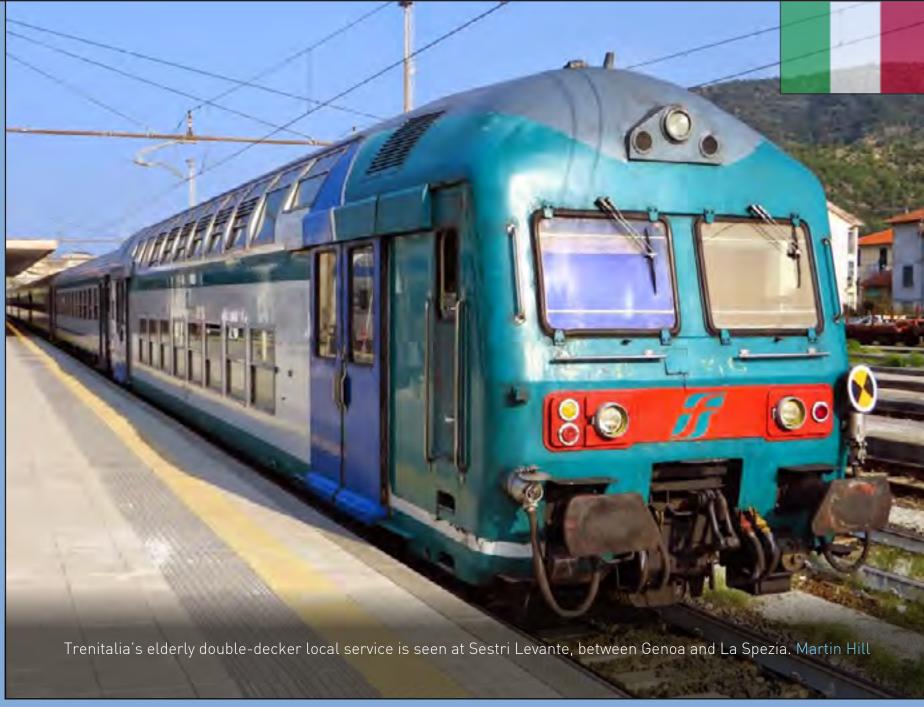
Alstom, leader of a consortium composed of Alcatel Lucent Romania and Pas 97 Impex, will supply the Romania national railway company (CFR S.A.) with Atlas 200, its ERTMS Level 2 solution for the Sighisoara-Coslariu-Simeria high-speed railway segment. Alstom's share in the contract is worth around 100 million Euro. This represents the beginning of an extensive modernisation and signalling works on the 170 km railway segment to be finalised in 40 months. The new signalling system will upgrade the commercial transportation speed from 120 km/h to 160 km/h. In order to test and measure the performances of the supplied systems, Alstom will provide to CFR one regional train, a Coradia Polyvalent dual-mode (electric and diesel), fully equipped with testing capabilities.

"We have carefully decided on the best solutions for this particular rail segment. This deal will greatly contribute to fast and safe rail transport in the region. The passengers will not only appreciate the increased speed and the enhanced comfort on the upgraded section, but also the design and the capabilities of the test train, showing what could be the solution for future passenger transportation needs in the country", said Gabriel Stanciu, Managing Director of Alstom Transport in Romania.

Alstom is the world leader in ERTMS technology with contracts awarded in 23 countries covering 12 500 km and more than 4 600 trains, and has equipped seven of the world's twelve high speed lines which use this technology. It is the second project with Atlas 200 in Romania. Alstom was also the first company to equip a very-high-speed line with the technology (Rome-Naples, Italy) as well as a cross-border high-speed line (Liège in Belgium to the German border), the line with the densest traffic (Mattstetten-Rothrist in Switzerland) and a line dedicated solely to freight transport (the Betuwe line in the Netherlands).

Coradia Polyvalent is a concentration of the technology created during over 30 years of experience. It is the only generation of trains to have a low floor throughout and to integrate bi-modal drive systems to give passengers a whole new experience of travelling on regional trains. The Coradia Polyvalent bi-modal power supply system reduces the train's environmental impact, aligning its operating mode to existing infrastructure on both electrified and non-electrified lines. Moreover, its architecture allows easy maintenance. The company's major ongoing projects in Romania are the 25 year maintenance services provided to Metrorex, as well as several modernization and rehabilitation projects for SNCFR.





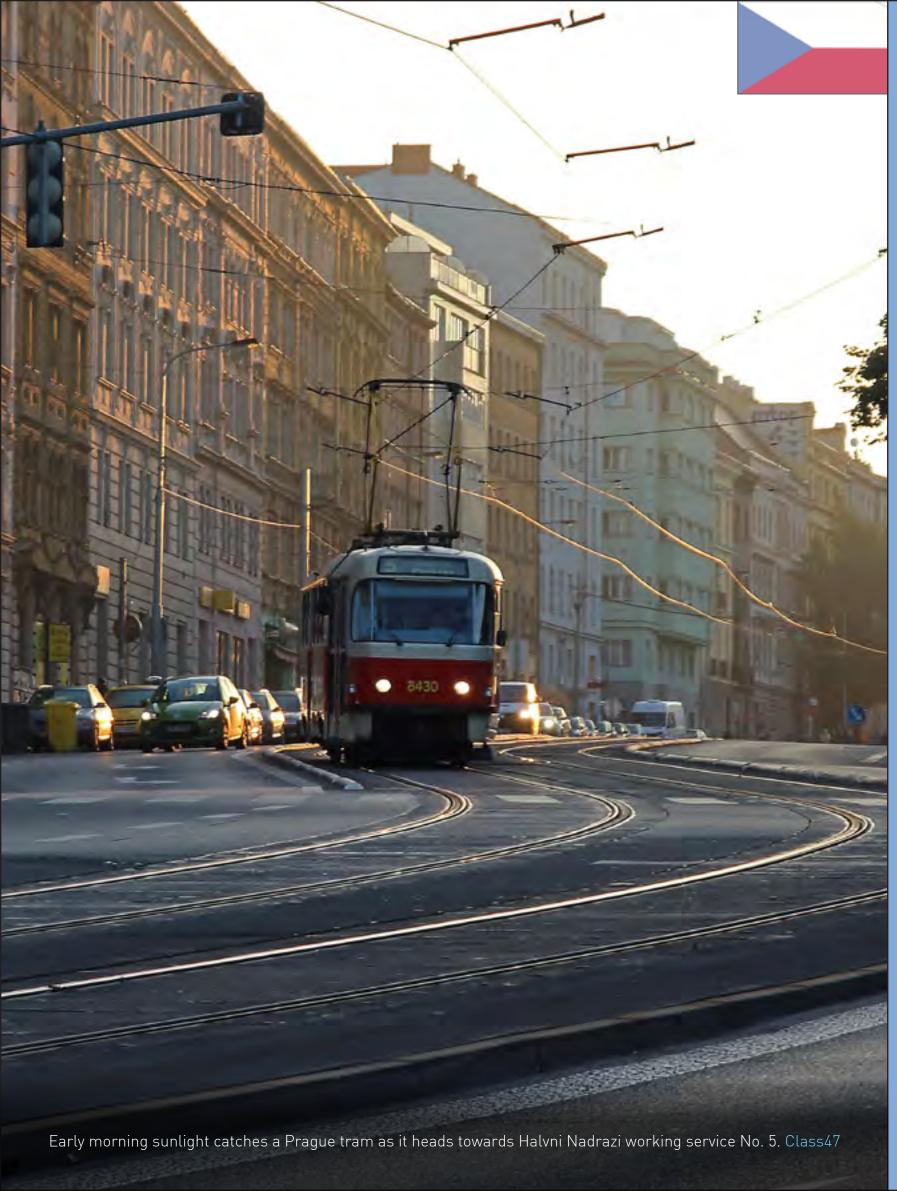
Alstom and Transmashholding to supply 3 additional low-floor trams to St. Petersburg

TramRus LLC, a joint venture of Alstom and its partner Transmashholding (TMH), signed a contract to supply St. Petersburg with 3 low-floor trams in addition to the one recently ordered by the city. The first one will be supplied by December 1st 2014 and the three others by December 20th. These 4 tramways have been specifically designed for Russia's infrastructure and climate.

The trams are 25m long with a capacity of over 200 passengers, nearly double that of existing fleets. It offers commuters a high level of comfort with spacious interiors and spaces dedicated to luggage, wheelchairs and prams. Additional comfort features include air-conditioning, ergonomic seats and reduced noise levels.

Modern engineering solutions such as composite materials, innovative bogies and modular structures will ensure reduced operation and maintenance costs. Equipped with a modern traction system, the new tram's energy consumption is over 10% lower than current trams.

With its 30-year lifecycle, the tram's lifespan is far greater than that of existing ones (18 years). It has been specially designed to cope with the cold climate, complex ground profile and heavy passenger flows of St. Petersburg.



Alstom delivers the first Régiolis to the Pays de la Loire region

Alstom delivered its first Régiolis next-generation regional train to the Pays de la Loire region on November 18th in the presence of Jacques Auxiette, President of the Pays de la Loire regional council, and Gilles Bontemps, council Vice President, together with Jacques Beltran, Vice President Sales and Marketing at Alstom Transport France. The first train was presented to council officials at a press tour of the Technicentre in Nantes.

The Pays de la Loire region has ordered twenty Régiolis trains, ten with dual-mode motors (diesel and electric) and ten electric. 72 metres long, these trains have four carriages and provide 218 seats. Half the carriages also have automatic passenger counting systems. These will help improve the monitoring of passenger traffic and occupancy rates in order to optimise operations. SNCF staff in the Pays de la Loire region will receive training in the new train during November and December 2014, in preparation for its entry into commercial service in January 2015.

Régiolis is part of Alstom's Coradia range of trains. It is modular and can be adapted to the requirements of each region: it is available in three lengths (56, 72 or 110 metres), has four levels of comfort to suit the distances covered and offers dual-mode or electric motors. Régiolis is an economical and environmentally friendly train due to its low energy consumption and reduced maintenance costs. Finally, it is accessible to everyone, as it has low, platform-level floors throughout.

To date, 184 Régiolis trains have been ordered by 12 French regions. In addition, 34 Coradia Liner trains, based on the same technology, have been ordered by the state, bringing the total number of orders placed, within the scope the framework contract awarded to Alstom by SNCF in 2009, to 218 trains. The first trains entered commercial service in April 2014 and 50 trains will be delivered to the regions of Alsace, Aquitaine, Basse Normandie, Lorraine, Midi-Pyrénées, Pays de la Loire, Picardie, Poitou-Charentes and Provence-Alpes-Côte d'Azur by the end of 2014.

Régiolis production generates over 4,000 jobs for Alstom and its suppliers across France. Six of Alstom's twelve sites in France are involved in the project: Reichshoffen for the design and assembly, Ornans for the engines, Le Creusot for the bogies, Tarbes for the power train equipment, Villeurbanne for the on-board electronics and Saint-Ouen for the visual design.



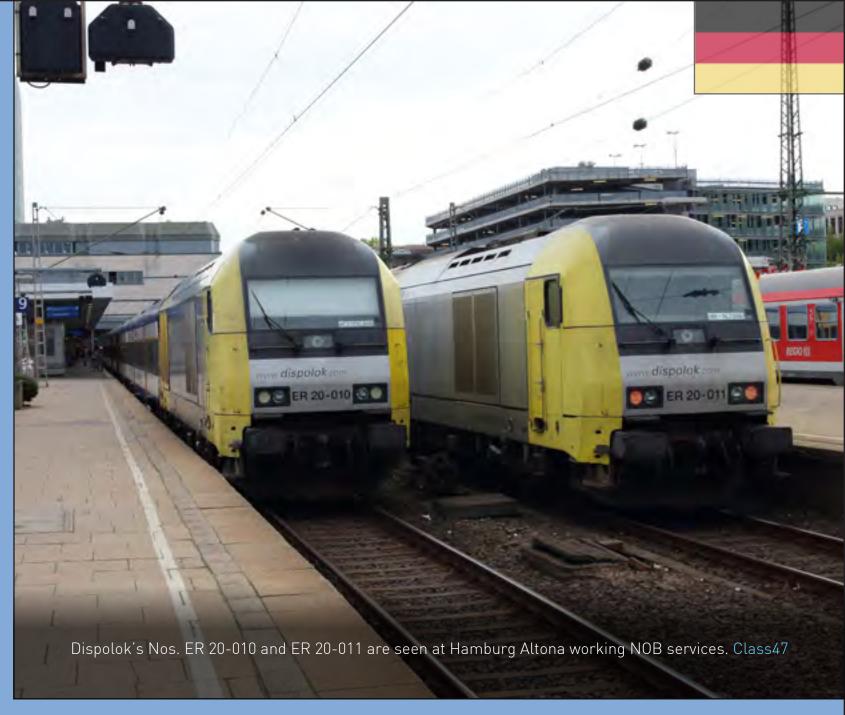
Alstom's new cutting-edge slab track technology enters test mode in Russia

Alstom has launched lifecycle tests for its advanced concrete slab track technology in Russia. The Russian Railways initiated the tests on November 15th in their facilities in Sherbinka near Moscow in the presence of Valentin Gapanovich, Senior Vice-President of the Russian Railways. The project includes the assessment of various slab tracks and their testing in local conditions, with a view to potentially implementing this cutting-edge technology on the very high speed lines in the future. Alstom in cooperation with Roszheldorproekt design institute, Vossloh, Pandrol/Railtech and LAFARGE Russia has built a 125-metre-long slab track section including 2 transition zones of 25 meters each, using its NBT technology. The main advantages of NBT are its mechanised construction method, as well as its high availability and compatibility with mixed traffic operation, passenger and freight. During the first testing phase the Russian Railways research centre VNIIZhT will run a loaded train along the section at 80 km/h. The most stable and available slab track solutions will be proposed for the next testing phase on a longer section at high and very high speeds. It is expected that, by 2016, the tracks will be able to carry up to 600 million tonnes.

"The infrastructural solution we offer in Sherbinka can be an important contribution to the future modernisation of the railway network in Russia, not only for high speed and very high speed lines, but also for urban transport. Our NBT technology used in this project has already been proven effective thanks to a 1km double-track section on the Gisors-Sergueux main line in



France, in operation since December 2013," said Thibault Desteract, Alstom Transport Senior Vice-President for CIS region. Slab track is a modern solution, which may significantly decrease the lifecycle cost of the tracks, as it reduces maintenance costs by almost half, compared to the standard ballast tracks.



Alstom's tramway system starts operation on the world's first 100% catenary-free line



This full system project - that was assigned to Alstom by Dubai Roads and Transport Authority (RTA) - was launched to foster multimodal transportation use and to reduce traffic congestion and pollution. This first Tramway in the entire Gulf region is expected to serve about 27,000 passengers per day and is anticipated to hit about 66,000 by 2020.

His Excellency, Mattar Al Tayer, Chairman of the Board and Executive Director of the Roads and Transport Authority (RTA), said: "The Dubai Tram is a brainchild of His Highness. Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, to provide an advanced transport system. When RTA was created in 2005, His Highness ordered to have an integrated and comprehensive solution for the area in order to accommodate the huge urbanization projects in the neighbourhood, particularly the JBR and the Marina and Al Sufouh area".

"The tram for Dubai, which we are proud to have handed over ahead of schedule, illustrates Alstom's strategy to serve all markets with a complete range of solutions while demonstrating our leading position in tramway systems.

Thanks to Alstom and RTA's close collaboration on the project, Dubai's citizens can now travel aboard one of the most sophisticated and comfortable tram in the world" said Henri Poupart-Lafarge.

The Dubai Tramway includes many Alstom's technological breakthrough. It is the first tram in the world able to run in temperatures of up to 50 °C and to withstand harsh climate conditions such as humidity and sandy atmosphere. Equipped with APS ground-level power supply, the system is also the first in the world to be catenary-free all along the line which is 10.6 km long and counts 11 stations. This technology enables perfect integration of the tramway into the cityscape. Lastly, it is the first line to be equipped with air-conditioned stations and automatic platform screen doors.

The Dubai Tram offers high-end comfort. The Citadis tram is 44 metres long and can accommodate 408 passengers in "gold", "silver" and "women & children" classes. The tram is equipped with real-time passenger information and video broadcasting. To better reflect the city's image, Citadis tram of Dubai has a distinctive diamond-shaped styling on the front end.

The Dubai Tramway is the eighth system delivered by Alstom in a decade. With seven others under implementation worldwide including the Lusail tram in Qatar, Alstom is the world leader in tramway systems.



Bombardier TRAXX AC Last Mile Locomotive Pulls Rail Cargo Group (RCG) Freight Train on 4000 km Test Run Across Southeast Europe

First time a single traction locomotive has pulled a Rail Cargo Group train across the Carpathian Mountains

Innovative electric locomotive with support diesel engine and battery reduced transport time and overcame electrical track malfunction

Rail technology leader Bombardier Transportation and ÖBB's freight division, Rail Cargo Group (RCG), have successfully completed a 4000 kilometre test run of a BOMBARDIER TRAXX AC Last Mile locomotive. The test run saw a BOMBARDIER TRAXX AC Last Mile locomotive pull a RCG freight train from Sopron, on the Austrian-Hungarian border through Romania and Bulgaria to Istanbul, Turkey (Tekirdag) and back. The trip followed a long distance intermodal route built by Rail Cargo Group to transport goods between the German Ruhr area to the Black Sea in Turkey. Currently this route has four departures per week with seven per week beginning in January.

The journey was not only a first for both Bombardier Transportation and RCG, but also an unprecedented achievement for this particular train configuration. On the test run, the TRAXX locomotive demonstrated its strength when this single locomotive pulled the 534 metre long, 1200 ton freight train across Romania's Carpathian Mountains. This rugged terrain typically requires the RCG train to have two locomotives. Earlier in the test run, an electrical failure along a 20 kilometre section of track provided another challenge. Here, the TRAXX AC Last Mile locomotive demonstrated its superior performance by crossing this non-electrified stretch using its Last Mile feature – avoiding a five-hour delay. The innovative Last Mile feature, a combination of an auxiliary diesel engine and battery, enables the locomotive to operate at full power for up to eight hours. The TRAXX's ability to run on non-electrified route sections for extended periods eliminates the need for additional shunting locomotives in container terminals, harbours or side tracks to factories. Furthermore, while in Last Mile mode, the locomotive is still capable of pulling equally heavy loads just as when under catenary wire power. The train's return journey ended in Sopron, Hungary.

High-ranked representatives of Rail Cargo Group and Bombardier Transportation welcomed the locomotive when it arrived back in Wien-Westbahnhof.

Commenting on the interplay between the train and the TRAXX AC Last Mile locomotive, Georg Kasperkovitz, Member of the Board of Rail Cargo Group, said, "Competitive rail freight traffic requires innovative solutions for customers and cost-efficient, reliable and steady production. To best meet these demands, Rail Cargo Group promotes and invests in new, modern technologies. The endurance test also included some very difficult conditions." On occasion of the locomotive's return to Austria, Ulrich Jochem, President, Locomotives, Bombardier Transportation said, "This journey provided us an excellent opportunity to once again prove the power and versatility of our TRAXX AC Last Mile locomotive. Both during the grid failure and while crossing the Carpathians, the locomotive demonstrated its exceptional performance under extreme conditions."

Photo: One of the stops on the journey - Svilengrad in Romania © RCG/OBB





Eurostar celebrates its 20th anniversary with the unveiling of its new e320 train

In the last two decades Eurostar has revolutionised cross-channel travel, providing a swift, seamless link between the UK and mainland Europe. With passengers increasingly choosing high speed rail over plane for short haul travel and demand at an all-time high, the business is now set for further expansion of its services into Europe. On the eve of its 20th anniversary Eurostar unveiled in public for the first time its new state-of-the-art e320 train scheduled to enter commercial service at the end of 2015. At the same time the company announced its decision to augment its fleet with a further 7 new e320 trains. With the original order of 10 e320s now in the final stage of completion, this increases the number of new trains to 17 in total

Beyond its core routes of Paris, Brussels and Lille, Eurostar serves a range of destinations including the French Alps, Swiss Alps and Geneva. May 2015 will see the start of a new year-round direct service to Provence, stopping at Lyon, Avignon and Marseille, followed at the end of 2016 by the launch of a direct route to Amsterdam with stops in Antwerp, Rotterdam and Schiphol along the way.

Nicolas Petrovic, Chief Executive of Eurostar, said: "Having had ten consecutive years of growth, we are seeing a record demand for our services and the addition of new trains to our fleet will be key to our growth ambitions. With just one year to go until our new e320 train comes into service, our passengers will soon see a complete transformation of our service. The combination of bold design, chic interiors and wifi connectivity will raise the bar, providing an unprecedented level of style and comfort for our customers."

The introduction of the e320 represents a major advance for international high speed rail. Built to a bespoke specification these trains are 'inter-operable' with the ability to operate across diverse European signalling systems, opening up the potential for a whole range of new direct services between the UK and European city centre destinations.

Carrying 900 passengers, the e320 boosts capacity per train by 20% and is capable of reaching a speed of 320 kph (200 mph). With the external livery and interiors designed by Pininfarina, the legendary Italian design house, world-renowned for its iconic car designs, the new Eurostar train boasts many innovative features aimed at maximising energy efficiency and delivering an enhanced experience for travellers. Recognising the importance of connectivity for passengers, going forward, the Eurostar fleet will be equipped with free wifi throughout the train, allowing customers to email, chat and tweet during their journey.

The new wifi portal will provide a range of information and entertainment including live news feeds and weather reports as well as a collection of destination guides. With the introduction of the e320, customers will enjoy more space per seat with each seat equipped with power points and a USB socket. Business passengers will experience the ultimate in on-board comfort with a carefully designed environment aimed at maximising productivity whilst offering a relaxing space. For leisure customers the e320 will represent a considerable upgrade with a newly designed bar buffet, ergonomically designed reclining seats and increased luggage areas.

Nicolas Petrovic said: "Over the last twenty years, we have led the way in cross-Channel high speed rail travel, cementing the link between the UK and mainland Europe. Our 20th birthday represents a key milestone for our business and marks the start of the next phase of growth and expansion. With this substantial investment in our fleet, our stations and the on-board experience, passengers can look forward to an exciting future."

PKP CARGO uses drones to protect itself against cargo theft

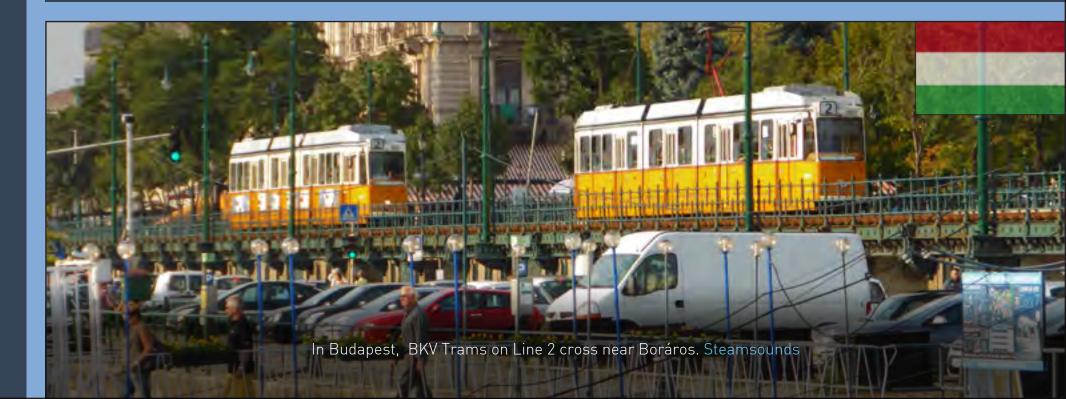
PKP CARGO has launched a wide-ranging campaign to secure shipments in order to reduce pilferage of transported solid fuels, which grow in intensity in the autumn and winter season. This year, a leader in rail freight carriage in Poland has decided to use the state-of-the-art technologies. Apart from new organisational solutions, rail car security features and preventive campaigns run in collaboration with the Railroad Guards Service, drones will be used for the first time to monitor theft-prone areas.

"Pilferage of bulk commodities when moved by our company is a phenomenon we have been tackling for many years, and ensuing losses amount to as much as several million zlotys per year", says Maciej Borecki, Head of Security and Audit Office at PKP CARGO. "In order to reduce the scale of this crime, this year we have decided to step up preventive measures and use the latest technologies." As a part of its measures, PKP CARGO focuses, first of all, on prevention. To this end, the carrier closely works with the Railroad Guards Service and the police who are competent to prosecute these crimes and perpetrators. In 2014, a special Threat Prevention Task Force was established, whose main goal is to reduce losses incurred by PKP CARGO. It operates mainly in the Silesian region, where thefts are most prevalent. The Task Force works closely with PKP CARGO offices in the region to obtain information about which coal mine and according to what timetable a coal shipment leaves. Members of the Task Force together with Railroad Guards monitor most vulnerable locations on an ongoing basis.

Additionally, cyclical preventive campaigns are organised in collaboration with specially trained response teams from the Railroad Guards Service. This year, PKP CARGO has started to use for this purpose drones, which make it possible to carry out aerial surveillance. These devices are equipped with different types of cameras, including infrared cameras, which make them effective, whatever the time of the day or weather conditions. PKP CARGO is also introducing much more effective bolt-based rail car security features. Rail cars have so far been secured by the so-called wiring, where door locks are blocked using standardised wires made of hardened steel. During tests of the new security features which involved over a hundred coal hoppers, not a single attempt to breach them has been successful.

"We can already say now that as a result of our hard work, this year we can see a gradual decrease in the number of such crimes compared to the last year. Only in the period between January and October, we managed to reduce losses related to thefts of solid fuels by over 20% in terms of the number of incidents, quantities of stolen coal and their value", says Maciej Borecki. "I am convinced that measures we have currently launched will allow us to reduce this criminal activity even further" – adds Maciej Borecki.

During the first ten months of 2014, the carrier recorded almost 900 instances of coal theft. The total value of ensuing losses has been estimated at over PLN 4 million, while the quantity of stolen coal – at over 8,000 tonnes. With the advent of winter months, a sharp rise in the number of documented incidents and the volume of cargo lost to theft can be seen. Thefts are usually committed by well-organised crime groups. One of the most frequently used methods is an attempt to stop the train e.g. by placing an obstacle across the tracks. In order to avoid derailment, train drivers are forced to stop the train set, informing relevant services about the obstacle. Then, thieves "syphon off" coal within a matter of minutes. During a single incident, thieves can manage to "syphon off" as much as several tonnes of coal.



AWARDING OF A CONTRACT EXTENSION FOR THE BUCHAREST METRO

The company Metrorex, the Bucharest metro system operator, has approved CAF the extension of the contract to supply metro units for the Romanian capital. This extension consist in the supply of 8 new metro units, to add to the 16 units first awarded to CAF in September 2011, which are currently in revenue service operation. The extension amounts to approximately 47 million euros, and will be financed with European Investment Bank funds.

The new units will be similar to those recently delivered, consisting of 6 cars with a stainless steel structure, four of which are motor cars and the other two trailer cars. The units provide for a passenger capacity of 1,200, along a length of 114m, with an unobstructed passage along the entire train. These vehicles are designed for mass passenger transit, with the utmost quality and safety standards, and can be accessed by persons with reduced mobility, with two areas for wheelchair users. Once more, this extension confirms the company's clear commitment to increasing their presence on the European market, where they were recently awarded the major contract to supply units for the Dutch company, NS. This is yet another to add to the various European capitals such as Belgrade, Istanbul, Stockholm, Tallin, Helsinki or Rome, where CAF currently has projects underway.

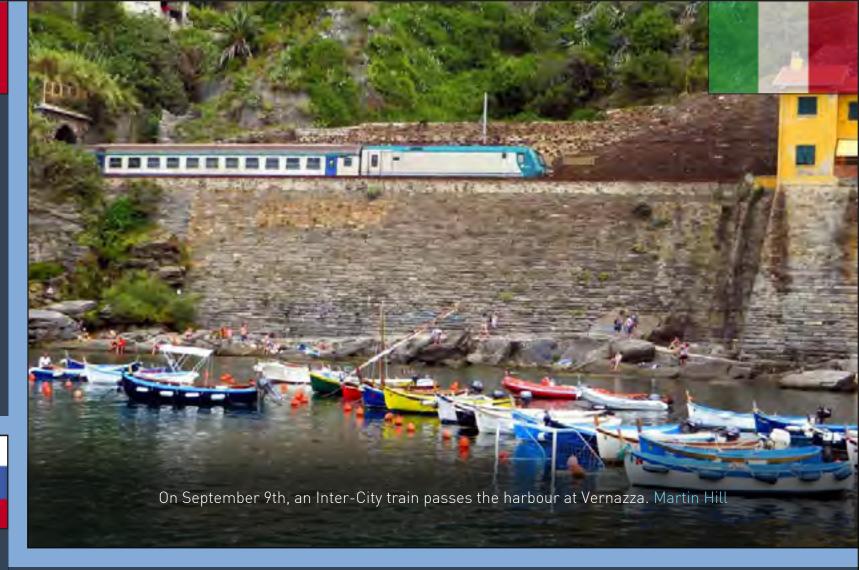
Škoda Transportation have introduced a new tram in Bratislava



The newest tram produced by the Škoda Pilsen plant has been introduced and put into operation in Bratislava. It is the first ForCity Plus tram of a bidirectional type. "I'm very happy that the first of the ForCity Plus trams generation has been introduced in Bratislava. I have a very fond and personal bond to this city. This is also why I believe that the new tram from Škoda Transportation will be enjoyed primarily by the residents of Bratislava. Apart from the modern design, it will mainly offer comfort and safe travel, plenty of space, a well-arranged audiovisual and informative system and last but not least, air-conditioning. I would be really happy if the Škoda trams formed an integral part of the Slovakian capital city," says Josef Bernard, Chief Executive Officer of Škoda Transportation.

"We've successfully completed three large orders of new vehicles primarily funded by the EU. The capital city of Bratislava will therefore gain new unidirectional and bidirectional trams and new trolleybuses. This significant step has been made possible thanks to the co-operation of the representatives of the Ministry of Transport, Construction and Regional Development of Slovakia who listened to our proposals and released funds from the Operational Transport Programme for the modernisation of our fleet. As we have also already used the option of purchasing new trams and trolleybuses, there will be a radical renewal of the outdated public transport fleet in Bratislava. I personally believe that the travelling public will appreciate the new comfort provided by carriages of European standard and the quality of public transport in our capital city will increase significantly," adds the Chairman and Chief Executive Officer of Bratislava Transportation Company Ing. Lubomír Belfi.The concept of the ForCity Plus vehicles is based on previous experience with low-floor trams. The delivery for the city of Bratislava contains both bidirectional and unidirectional vehicles equipped with modern electronics. All trams have five car bodies; the first and the last chassis are fully revolving and have a gauge of 1000 mm. The vehicle is equipped with six traction engines, each one with the output of 100 kW, providing the vehicle with excellent dynamic properties.

The vehicles, in particular, offer plenty of space for the passengers, suitable location of handholds and very quiet operation. The trams are completely air-conditioned, including the driver's cabin. A well-arranged audiovisual informative system, including a device for voice communication between blind passengers and the driver comes as standard. Passengers with reduced mobility will find a tilting platform which enables their convenient boarding and unboarding. Safety of the passengers is guaranteed by CCTV with six internal and six external cameras. In June 2013, Škoda Transportation was the winner of two public contracts for the Bratislava Transportation Company. It was for fifteen bidirectional and fifteen unidirectional trams. In April 2014, the first option for other fifteen bidirectional trams was exercised. The delivery of the first 45 contracted trams is planned duing 2015. The deadline for the delivery of the 15 unidirectional trams from the last exercised option should be roughly by the middle of 2016.





Alstom delivered the final Citadis tram to Nottingham

Alstom has delivered the last of the 22 Citadis trams for Nottingham Express Transit (NET). While five of them are already on service on Line 1, the 17 others - presently being tested - will enter service next year on the expanded NET network. The network will be composed of two tramway lines departing from Nottingham station to serve the south and southwest of the city. With up to 10 million passengers per year on the existing line, the expanded network will increase capacity to an estimated 23 million passenger a year. The extension to the network, which is being built by Alstom with joint venture partner Taylor Woodrow, totals 17.5 km and has 28 stations, taking the extended network to 32km and 51 stations.

Terence Watson, Alstom UK
President, said: "We're
delighted to have delivered
the final Citadis for
Nottingham, especially as the
Citadis trams, which have been
specially customised in the
distinct and stylish NET tram
brand, are becoming a more
common sight on the city's
streets.

The process of testing the Citadis and getting them into service is going extremely well and we look forward to a long

and fruitful partnership with the City."

The Citadis for Nottingham is 32 metres long and can carry up to 274 people. It is expected to have a 35-year lifetime, with a forecast annual mileage of around 90,000 km. Its maximum speed is 70 km/h and it has been specially designed to fit in with the pre-existing fleet of trams already operating in Nottingham. The 22 new Citadis trams were built in Alstom's facility in Barcelona. Alstom is in charge of their maintenance along with the 15 other trams, which are non-Alstom, already in service on Line 1.





Stadler shipped the first double deck
Aeroexpress train to Moscow



Swiss rolling stock manufacturer Stadler Rail Group has successfully shipped to Moscow the first unit of the altogether 25 double-decker KISS trains ordered by Russian railway operator Aeroexpress. The train immediately starts the homologation process with dynamic tests in the examination ring of Russian Railways in Scherbinka. According to the plans, commercial operation of the first train is to start in the summer of 2015, while the last train is expected to enter service one year later during the summer of 2016. The new trains will carry passengers between Moscow and the international airports of Domodedovo, Sheremetyevo and Vnukovo.

The first six-car double deck train arrived from Stadler's recently built factory located in the outskirts of Minsk in Belarus to Moscow Depot of Aeroexpress, where it was officially presented to the media and officials including the Moscow Mayor Sergey Sobyanin, Maxim Liksutov, Deputy Mayor for Transport and Traffic Infrastructure Development, Pierre Helg, Ambassador of Switzerland to the Russian Federation, and Igor Petrishenko, Ambassador of Belorussia to the Russian Federation.

The new double-deckers are 3,400 millimetres wide with a height of 5,240 millimetres. The trains are designed to cope with the specific Russian climate, which can range from -50 degrees Celsius to +40 degrees Celsius and in this respect are based on the FLIRT vehicles delivered to Finland, Norway, Estonia and Belarus. The trains will have a speed of 160 km/h and have comfortable,

bright interiors in two classes (business and economy). The carriages are made from lightweight aluminium, which makes the vehicles much lighter than the traditional steel carriages. The reduced weight means that the train operator can make significant energy savings on everyday services.

Stadler Rail Group has become a strategic partner of Aeroexpress after participating and winning an international tender in Moscow in 2013. The parties signed contract on May 28 last year. The contract includes the supply of 25 double-decker KISS trains consisting of altogether 118 coaches, out of which 16 units will be four-car and 9 will be six-car vehicles. The first 4 units are produced by the factory of Stadler in Altenrhein, Switzerland, while the remaining 21 are being made in the latest investment of Stadler in Minsk, Belarus. Aeroexpress purchases trains at its own expense, therewith investing into the development of railway passenger transport. The new double-deck fleet will allow a 35-50% increase in the transport capacity of Aeroexpress trains.

The next stage will include dynamic testing and different strict authority examinations, including tests for winter operation on the test ring in Scherbinka, which are to result in obtaining the homologation. According to the contract, commercial operation of the first train is to commence in June 2015, while the last unit is expected to enter service in June 2016.

ÖBB CityJet: Setting new standards in transport

First train ready built - Production process in full swing

OBB have ordered for local and regional services worth about 590 million euros worth of new trains. In doing so, ÖBB continue to modernize their fleet.

These new Siemens trains will set new high standards in passenger comfort. In the fall of 2014, the first train left the factory, and is currently being checked in the test centre. Thereafter the first ÖBB CityJet moves in January 2015 for wind tunnel testing in Austria, and as of March 2015 it will start the licensing runs. As part of the value provided in Austria, the bogies come from the Siemens plant in Graz, with the final production for about two-thirds of trains is achieved as with the railjets and the Taurus locomotives in ÖBB workshops around Austria. From Winter 2015 passengers will be able to use the train for the first time.

31 of these new trains are provided for the S-Bahn in Vienna and Lower Austria, 35 are for regional traffic in Lower Austria, 18 for regional transport in Styria and 17 for regional services in Upper Austria.

Passengers enjoy greater comfort than ever

ÖBB CityJet is a three-piece EMU that has 244 seats in the S-Bahn version and 259 in the regional rail version. Comfortable low-floor entrances ensure barrier-free access without ramps for wheelchair users and families with pushchairs. Great emphasis is placed on the seat comfort with passengers relaxing in comfortable, reclining seats with armrests and footrests, LED lighting and passenger information with screens inside the carriages. In addition sockets, tables and window blinds are provided. The ÖBB CityJet has a top speed of 160 km/h.

Modern train travel - efficient railway operations

Also for ÖBB, operation of the new features is advantageous: Compared to existing vehicles, the mileage between maintenance intervals can be up to three times higher than in existing vehicles. The approval of the 160-km/h ÖBB CityJets in Austria will take place across all routes and it can be technically adapted to allow speeds of up to 250 km/h for fast long distance trains.

A high efficiency of the power plant, electrodynamic regenerative braking with energy recovery, oil-free compressors provides efficient and resource-efficient rail operations. In addition, the vehicle interior and exterior is equipped with energy-efficient LED lamps, and low noise preheating protects the residents when the train is parked at night. CO 2 probes incorporated determine the occupancy of the vehicle and ensure environmentally friendly control of redundant air conditioning without compromising passenger comfort. The drivers are also supported by technical means to save energy when driving.

Fit for the Future

ÖBB from December 2015, will have introduced five trains on services and all currently ordered should be in service by January 2018. Flexibility for use in the more distant future is already scheduled: All trains will get a full listing of Germany, and they comply with the latest European Interoperability Guidelines TSI the EU.

If ÖBB orders additional vehicles for use in Switzerland or Italy, the production of trains shall be only minimally modified to meet the eligibility criteria. To be able to offer more capacity, ÖBB could extend the trains also an additional car and put them on routes where the length of the platform allows this.



Consistent ÖBB fleet modernization

ÖBB have invested in the last ten years, more than 2 billion euros in renewing their fleets. Within Europe, ÖBB has the most modern train fleets. For the local and regional transport new double-deck coaches, Desiro trains and Talent units were procured. In long-distance transport, the use of ÖBB Railjet brought a noticeable boost in comfort for the passengers. Now follows the next step with ÖBB CityJet. These new features will set new standards in rail transport.

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