# Raitalk Magazine Xtra

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### Welcome

Welcome to the Railtalk Magazine Xtra, which compliments the main Railtalk Magazine and means that we can put even more pages together every month.

As always in Xtra, we concentrate on life outside the UK, and once again we have some excellent shots from some of Europes finest photographers. Our "From the UK" section has a look at the East Lancs Railway's DMU Gala.

This month I should like to say a another special thanks to Colin Gildersleve for some more excellent shots from Australia, and also a big thanks again this month to Martin Grill for some more excellent Czech shots both here in the magazine and on our forum. I hope that you all enjoy them.

Once again many thanks to the many people who have contributed this month, 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: Colin Gildersleve, Steve Madden, Brian Battersby, Richard Hargreaves, David Hollowood, Pavel Kopec, Tomáš Kubovec, Ron Halestrap, Martin Grill, Pavel Šturm, and Pavel Martoch.

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#### **Contact Us**

Editor: David david@railtalkmagazine.co.uk

Co Editor: Andy Patten editor@railtalkmagazine.co.uk

Front Cover: CD Cargo 751.338-5 is seen with a freight train between Lipová and Lázne. Martin Grill This Page: Czech Diesel Class 754.022-2, is seen at Ramzová, with R1403 the fast train from Brno - Jeseník. Martin Grill **Pictures** 



OBB Class 1116.049-6 is seen climing the line out of Wien with a heavily loaded freight on February 23rd. *Class*47



The delightful local tram service at Völkermarkt on the Salzburg - Wien line, is seen departing for Attersee, a half hour ride away.



Class 754 diesel-electric locomotives. It's planned to replace old Class 749 (beloved six-cylinder, non-silenced machines) by Class 754 (quieter beasts). Martin Grill







the new blue Czech Railways corporate livery, called "Najbrt." Martin Grill



Queensland Rail National's 6003, 6001 & CLF4 power up as the last container wagon clears Forrestfield yard. Colin Gildersleve





Australian Railroad Groups DAZ 1904 & P 2514 are seen on empty grain at Kenwic. Colin Gildersleve





A 2 car Avonlink DMU departs Midland for its trip to Northam, Western Australia on January 18th. Colin Gildersleve







DB liveried diesel unit 612.571 is seen passing Dolni Smrzovka on January 24th. Pavel Šturm

Queensland Rail National's G534 & G516 take the 7PA1 intermodal service from Perth to Sydney through the suburbs of Perth on Saturday 14 November 2009. Unlike the Melbourne Intermodal service these containers are not double stacked, due to the limited clearance when running through the tunnels in the Blue Mountains in New South Wales. *Colin Gildersleve* 



Through the snow Czech Diesel Class 750.160-4 passes between Novina and Křižany on February 7th. Pavel Martoch

Australian Railroad Group's DD2355 waits at the loop signal at Brunswick Junction as the Australind passes, heading south. The Australind is the only passenger train still to run on the Western Australian South West narrow gauge system. It runs the 187 kilometers from Perth to Bunbury and return, twice a day. All other passenger traffic is done by long distance coaches. When the line is clear DD2355 will take its train of hoppers into the Worsley Alumina Minesite area. Colin Gildersleve

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Swiss ABe 8/12 3502 is seen between Bernina Lagalp and Ospizio Bernina on February 13th. Tomáš Kubovec



split to make separate shorter trains to run to different industries in the Kwinana area, on the West Coast of Western Australia. Colin Gildersleve





Several Austrian OBB locos await their next duties at Linz deopt on February 24th. Andy

### The West Coast Wilderness Railway

The West Coast Wilderness Railway was originally built in November 1892 for the Mount Lyell Mining Co and utilised the Abt system of cog railway for steep sections. The railway was built as the only way to get the copper from the mine at Queenstown to the port at Strahan. It was the only access through to Queenstown. The railway closed in 1963 due to road competition. After much campaigning by locals to reopen the railway and money negotiated from the Government the railway was rebuilt and finally reopened on 27 December 2002 as a tourist railway. Fortunately the original Abt locos were either put in museums or on static display. Three of the original 5 locos have been restored and are now in use, all other rolling stock was totally new, with year round tourists in mind. This 3'6' gauge railway is worked by a steam loco from Queenstown to Dubbill Barrill, the midway point and an 0-4-0 Ruston shunter from Strahan to Dubbill Barrill. At this point the locos change trains, whilst lunch is had by the participants. On the 2nd leg of the trip the passengers who travelled from Strahan on the diesel loco, now have the steam loco down to Queenstown and the passengers that travelled up by steam loco are now diesel hauled to Strahan. Passengers are then transported back to their start point by road coach.

## The West Coast Wilderness Railway





Seven leading European freight railways have set up, Allianz Xrail. Xrail pursues the goal of the international carload rail traffic to provide customer friendly and efficient. The companies want to improve the competitiveness of rail freight noticeable and thus actively contribute to the reduction in road congestion and the environment.

The wagon-load transport has a share of around 50 percent of European freight transport by rail. According to studies, there is considerable international growth potential. The main mode of transport, will now be more attractive and more efficient. That is the goal of the new Xrail Alliance, which was officially founded in Zurich on February 19th with the signing of the alliance agreement by the CEOs of the partner orbits. The seven founding partners of Xrail are CD Cargo (Czech Republic), CFL cargo (Luxembourg), DB Schenker Rail (Germany, Netherlands, Denmark), Green Cargo (Sweden, Norway), Rail Cargo Austria (Austria, Hungary), SBB Cargo Logistics (Switzerland) and SNCB (Belgium). The alliance intends to increase the quality and

competitiveness of the European cargo transport by railcar to the road. "Thanks to close cooperation in the production and information processes, we can use a considerable potential for increased efficiency and quality," said project leader Xrail Günther J. Ferk. With Xrail, customers will benefit from international production standards in three areas: reliability (at least 90 per cent punctuality in the international cargo transport vehicles for the relations within the Xrail network), transparency (international timetables for railway siding siding with the customer, the active information), supply process (with standard requests the goal of a maximum of three days processing time).

During the pilot phase we were already serving the first customers Xrail standards. Xrail now connects the main economic regions in Belgium, Germany, Luxembourg, Austria, Sweden, Switzerland and the Czech Republic. This Xrail builds on the existing infrastructure of the TEN-T transport corridors of the European Union (Trans-European Transport Network). The long term goal of Xrail is the establishment of a comprehensive European quality network for the wagon load traffic.

In the truckload market, fixed costs make up around 90 percent of total costs. Therefore, the alliance partners intend to use their network optimally to ensure the further

SBB Cargo

development of the wagon-load traffic. They are also good news for the environment: The environmental performance of freight transport by rail is significantly better than those on the road, especially over long transport distances.

Xrail was initiated in 2007 under the leadership of the International Union of Railways UIC, Paris. Since then, the alliance partners under the coordination of the UIC international production standards, the necessary IT systems and develop measures to improve quality and drafted the treaty of alliance. "The alliance provides the foundation for a sustainable carload traffic in Europe," said Oliver Sellnick, director of the UIC Freight Xrail includes the production of international truckload freight traffic between the lanes. It does not affect the Ganzzugsverkehr still combined transport swap bodies. Even the commercial part of the wagon-load traffic, such as customer contacts and pricing to provide the railways continue to operate independently and there are competing with each other. Other hand, commit themselves Xrail partner to its customers to implement the high quality and service standards that have been defined within the alliance.



#### Alstom will provide 23 metros to Amsterdam

The municipality of Amsterdam (Netherlands) has placed an order with Alstom Transport for 23 metro trainsets, for a total amount of around €200 million. The contract includes an option for additional metro trainsets for the North/South line which is under construction.

Part of Alstom's Metropolis range, the metros will be produced in its Valenciennes (France) and Katowice (Poland) sites. The first trainset will be delivered in the Spring of 2012. All the trainsets are meant for the existing metro lines of Amsterdam, with a commercial service starting at the end of 2012.

Amsterdam's Metropolis will make access and getting around on board easier thanks to large doors, continuous low floor, extra wide chairs and gangways between the coaches. Besides, dynamic travel information, communication connections and transparent interiors will improve passengers' safety and comfort. Thanks to larger length of the new metro trains (116 m), the total transportation capacity will increase with approximately 50%.

This order forms part of an ambitious public transport policy adopted by the municipality of Amsterdam, the City region and the operator, GVB. The development and modernisation programme for the Amsterdam metro includes a number of other initiatives, such as the creation of a new North/South line, the renovation of the East line and the rebuilding of the Amstelveen line.

"The new metro means a big quality leap for all travellers including disabled. It will further enhance the attractiveness of the metro system, which is good for the environment, the city and the region", declared the alderman Hans Gerson. "Alstom is proud to be the supplier of this new generation metro's for the city of Amsterdam. A metro that, thanks to its unique features, will strengthen the bond of the Amsterdam people with their transportation system", completed Andreas Knitter, North Europe General manager for Alstom Transport.

In fulfilling this contract, Alstom will draw on its expertise in the field of metro transport. One in four metros presently in operation in the world is an Alstom metro. In total, more than 3,000 Metropolis coaches have been sold across the world in cities such as Barcelona, Warsaw, Budapest, Istanbul, Singapore, Shanghai, Nanjing, Buenos Aires, Santiago de Chile and Santo Domingo.

The main characteristics of the Amsterdam Metropolis

- Each trainset is made up of 6 coaches.
- The trainsets are 116 metres long and 230 cm high.
- 174 wide seats are installed in the length direction of the vehicle.
- Total capacity is of 960 passengers per train.
- Maximum speed is of 80 km/hrs.
- Each trainset is equipped with high doors (208 cm). There are 24 doors per side per vehicle.
- The trainsets feature a low floor and gangways between coaches.
- Wheelchair facilities are installed in 2 multi functional spaces.
- Lighting of the trainsets is completely constructed with sustainable LED technology.
- Trainsets are equipped with quality travel information, communication connections and cameras surveillance.
- Noise reducing equipment is installed on board.
- Trainsets meet the strongest fire safety demands.
- Trainsets are fully prepared for automatic transport without driver

#### New contracts for Veolia Transport in Germany

Veolia Verkehr, Veolia Transport's German subsidiary, is continuing to grow in Germany with 13 new regional passenger rail lines in three different regions: Saxony, Bavaria and North Rhine-Westphalia.

The first contract concerns the Leipzig regional rail system. Veolia Verkehr operates a 219 km system with eight lines. The contract is for three years and runs until end 2012, when transportation in the Leipzig region will be reorganized, with completion of the rail tunnel that will cross the city. This contract, which took effect in December 2009, corresponds to 22 diesel railcars and 150 employees taken on by Veolia Verkehr. It will generate a cumulative revenue of around 100 millions euros over the contract period.

In Bavaria, the Bayerische Regiobahn (BRB) operates a 2 lines system of approximately 200 km in the area of Augsburg. The contract started in December 2008 and will run until end 2019. In 2009, the contract was extended by the line Augsburg-Ingolstadt-Eichstätt. For the whole contract period it will generate a cumulative revenue of around 200 millions euros. Veolia Transport will be taking on 95 new employees and operating 28 diesel railcars, which travel around 3 million km/year. One year after BRB brought the Augsburg-Schongau line into service, the expertise of Veolia Verkehr was recognized, with a rise in passenger numbers on these lines formerly operated by Deutsche Bahn, thanks to the policy of close communication with passengers. BRB contributed to this improvement with a new customer-relations service, an improved ticketing system and child-friendly facilities in the trains. Lastly, in North Rhine-Westphalia, NordWestBahn (NWB) is operating three new lines between Northern Rhineland and Westphalia.

The contract, which started at the end of 2009, runs for 16 years, until 2025, and will generate cumulative revenue of over 500 million euros for the whole contract period. NWB will have to recruit some 90 new employees, taking the total to around 500 people, to operate a 1,054 km system with approximately 100 diesel railcars. In December 2010, two additional lines will be added between Oberhausen and Duisburg-Ruhrort and between Oberhausen and Dorsten.

#### Bombardier Wins the "Régio2N" Regional Double-deck Train Tender from SNCF for the French Regions

#### Brand new concept: articulated wide-body double-deck train designed and built at Bombardier's site in Crespin in Northern France

Bombardier Transportation has won a tender for the new regional double-deck trains organized by the French Railways (SNCF) on behalf of the French Regions. The framework contract contemplates the design and manufacturing of 860 double-deck electrical multiple units (EMU) for a total amount of approximately 8 billion euros (\$11 billion US), subject to exercising some technical options. With this framework contract, SNCF also signed a first firm order for 80 trains valued at approximately 800 million euros (\$1.1 billion US), financed by the Regions.

So far, six Regions have placed orders, which they will finance: Aquitaine, Bretagne, Centre, Nord-Pas de Calais, Provence-Alpes-Côte d'Azur and Rhône-Alpes. First deliveries of this firm order are scheduled to take place in June 2013 and will continue until December 2015.



Bombardier developed a new double-deck train platform especially for this tender. It includes the following characteristics:

• a modular concept to meet the Regions' various needs in terms of suburban, regional and intercity services;

- wide-body cars to offer unmatched capacity and a high level of comfort;
- an articulated architecture and wide connectors which create transparency throughout the length of the train and an increased sense of security.

This train features technical innovations in terms of reliability, availability, and sustainability, while generating economic benefits, like reduced maintenance costs and energy consumption.

The new regional double-deck train was created by Bombardier teams in Crespin, in Northern France. Bombardier will also design, build and test these vehicles at the site. As the largest industrial rail site in France and a partner of the Nord-Pas de Calais Rail Competitivity Cluster, the Crespin facility has a staff of 2,000, including 500 engineers and managers. It relies upon a wide network of local suppliers and sub-contractors. Several suppliers have decided to set up their operations next to Bombardier, in the Trans Avenir industrial park, reinforcing local employment opportunities and economy.

"We thank the Regions and SNCF for their trust in this large-scale project for which Bombardier Crespin teams have demonstrated their creativity and engineering excellence. These teams are now on the starting blocks to implement this important project," said Jean Bergé, president of Bombardier Transportation France. "The solution created by our engineers is a train which stands out by its width, capacity, comfort and polyvalence. It will become a reference product, and will support the regional rail transport development in our country."



#### Stadler builds "mega-locomotive"

Stadler Rail is building the world's biggest and most powerful ever rack-and-pinion locomotive for the Brazilian cargo company MRS Logística S.A.

MRS has ordered seven of these locomotives from Stadler, worth about CHF 60 million (including reserve materials), for the freight line from São Paulo to the docks in Santos. An option for three further locomotives has also been agreed. The vehicles will be built in Bussnang and delivered in 2012/2013. Once again, thanks to its high levels of innovation. Stadler Rail has been able to handle another order with 80% added value in Switzerland. Stadler Rail is the global leader in the manufacture of rack-and-pinion rail vehicles. Peter Jenelten, Executive Vice President Marketing & Sales at Stadler Rail Group, is delighted about the order for this unique locomotive: "This gives Stadler Rail the chance to demonstrate its innovation power yet again. Thanks to our experienced engineering team we are in a position to offer all of our customers tailor-made solutions." In the last few years Stadler has built new rack and-pinion vehicles for the Swiss

Jungfraubahn and Matterhorn Gotthard Bahn, the Zugspitzbahn in Bavaria, the FGC in Catalunya and the Greek OSE, among others. In addition, last autumn Stadler received its biggest rack-and-pinion rail order for Zentralbahn's InterRegio trains on the Swiss Brünig line. The large Brazilian cargo company MRS Logística S.A. ordered the seven powerful rack-and pinion freight locomotives from Stadler Rail mainly for use with heavy trains carrying iron ore. The freight line from São Paulo to the Santos docks is a 1,600-millimetre broad-gauge track with a 9-kilometre-long ramp, along which the rack runs. With a power of 5,000 kW, 700 kN tractive force at starting and a length of almost 18 metres per vehicle, they will be the largest and most powerful rack-and-pinion locomotives ever. Two of these locomotives in double traction will have a towing capacity of 750 tonnes on the 104‰ ramps, meaning they will be 50% more powerful than those currently in use. The four-axle locomotives have two bogies, which in turn each have two pinion transmission systems engaging with the triple-lamella Abt rack. Support is provided by two separate adhesion transmission systems, which contribute about 25% of the traction as the train goes uphill. The regenerative ability of modern traction equipment also enables massive energy savings to be made on the 3 kV DC line.



## Alstom to supply 23 Coradia Lint regional trains to HLB in Germany

German rail operator HLB has placed a €65 million order with Alstom Transport for 23 new Coradia Lint regional trains. These trains, intended for the state of Hesse, are slated to go into service in December 2011.

The Coradia Lint trains are two-car Diesel Multiple Units. They will be designed and produced at Alstom's Salzgitter site in Germany. Each train can accommodate up to 116 passengers under optimal conditions of comfort at speeds of up to 120 kph. Mobile landings, adaptable to all platform heights, will facilitate the boarding and disembarkation of passengers. On-board surveillance cameras will be used to reinforce passenger safety, and a special access ramp and two wheelchair spaces will be provided in each car to ensure optimal comfort for the mobility-impaired. The Coradia Lint range also complies with Alstom's environmental policy and the trains are 95% recyclable.

Manufactured from service-proven components based on highly dependable technology, Alstom's Coradia Lint range has enjoyed considerable commercial success. Since the launch of the range's first trains in 2000, Alstom has sold over 500 such trains to both public and private operators in Germany, the Netherlands and Denmark. The range has proven its worth throughout more than 350 million km of commercial service.

This new order will enable HLB to expand its rail fleet, which now includes over 60 Coradia Lint trains. "This order is a token of the exceptional confidence accorded to Alstom and the quality of its products. This is the third order placed by Hesse in recent years and we are delighted with our always excellent relations with HLB," stated Martin Lange, managing director of Alstom Transport in Germany.

<sup>1</sup> HLB : Hessische Landesbahn GmbH

## Roll-out of the LEB's first new suburban train

Cantonal councillor François Marthaler, head of the Department of Infrastructure, Yvan Nicolier, chairman of the Lausanne-Echallens-Bercher-Bahn (LEB), and Peter Spuhler, owner and CEO of Stadler Rail, together with other guests, have recently celebrated the roll-out of the first of six new RBe 4/8 multiple-unit trains at Echallens station. The invited guests were able to take this opportunity to experience the benefits of the new trains for themselves on the inaugural journey from Echallens to Bercher and back. The new trains will start scheduled operations from May 2010. Before that can happen, however, the fleet must pass various approval tests.

The order, including spare parts, is worth around CHF 41 million. The vehicles are being built in the Altenrhein works, meaning that around 80% of the added value is being generated in Switzerland.

The LEB awarded Stadler the contract shortly before Christmas 2008, and just 14 months later, the first of these customised suburban multiple-unit trains can be unveiled to the public and used for its maiden journey from Echallens to Bercher and back. Peter Spuhler, owner and CEO of the Stadler Rail Group, is particularly pleased: "We were only able to keep to this ambitious schedule due to the co-operation between the two project teams. I would therefore like to thank everyone involved. Moreover, Stadler has been able to handle another order with 80% added value in Switzerland, proving its excellence in developing and manufacturing customised vehicles."

#### The new trains will be used on the LEB's

Lausanne–Echallens–Bercher route, which connects Lausanne city centre to the conurbations in the Echallens area and the attractive rural region towards Bercher in the heart of the Canton of Vaud. Thus, the LEB has to cater both for heavy commuter traffic and for tourists. The time until scheduled operations are due to start in May 2010 will be spent testing the vehicles and submitting them for approval.

"This rolling stock, for which the canton granted a loan guarantee of over CHF 40 million, clearly offers users 'more' of both comfort and accessibility. These multiple-unit trains are also essential to running trains every quarter of an hour between Cheseaux and Lausanne and, being so modern, it will certainly be possible to win more customers onto public transport in the Lausanne urban area. Improving services is also one of the objectives of the cantonal structural plan and the Lausanne–Morges conurbation project as well as the 'OPair' action plan," says cantonal councillor François Marthaler.

Yvan Nicolier, chairman of the LEB, adds, "The LEB is experiencing a rapid increase in traffic: up over 100% in less than 10 years! We have high expectations of this new rolling stock: improved operating conditions from better performance and reliable operation. In particular, the low-floor entry will enable passengers to embark and disembark quickly, which will improve the reliability of the timetable at peak times. The ease with which bicycles can be loaded and unloaded onto the train will probably attract more commuters and day trippers."

The RBe 4/8 has been customised to the LEB's needs based on tried-and-tested modules. One modification is that the different embarkation heights at the stops (from pavement level to 550 millimetres over the top of the rail) are handled by means of two sliding steps situated one above the other. The RBe 4/8 is a metre-gauge multiple-unit train, over 60% of which has a low-floor design. The vehicle is 42.1 metres long and has capacity for 306 passengers, 118 of which seated. Air conditioning and bogies with air suspension improve passenger comfort. Eight 140-centimetre-wide doors allow passengers to embark and disembark quickly. If required, the train can be extended with an intermediate car.



#### FLIRT the first EMU in Poland to run 160 kph

Fourteen FLIRT trains produced and delivered by Stadler for the Mazovia and Silesia provinces have been granted the permanent Rail Transport Authority's (Urząd Transportu Kolejowego) homologation to run at a speed of 160 kph. The FLIRT train is the first Polish EMU, which got this authorisation. The corresponding temporary homologation for the FLIRT trains was already issued by the Rail Transport Authority in May 2008. Stadler's vehicles are modern, safe and comfortable, and hence much appreciated by passengers in Poland. Additionally, they can be run in multiple traction and have very favourable life cycle costs, as their energy consumption, maintenance costs and their technical service expenditure are very low. Such costs need to be evaluated over the train's whole life span of approximately 30 years, and are even more significant than the initial purchase price of the trains.

"We are very proud that the FLIRT trains produced by Stadler for the Mazovia and Silesia provinces as the first EMUs in Poland received the permanent Rail Transport Authority's homologation to run at a speed of 160 kph and thus fully fulfil the specific requirements of the Polish railway law. Nowadays billions of Polish zlotys are being spent on the modernisation of railroads in Poland to meet the requirements of high-speed lines. These investments, but only combined with the purchase of fast trains, make sense for taxpayers and passengers," said Stanisław Skalski, Sales Manager of Stadler Rail Group and Member of the Management Board of Stadler Polska.

The FLIRT trains have also been homologated to be operated in multiple traction in Poland.





So far Stadler has sold over 540 FLIRT trains for several customers from Switzerland, Germany, Italy, Hungary, Finland, Norway, Poland, France, Austria and Algeria, and the vehicles are very much appreciated by the company's customers and loved by passengers.

On 12 February 2010 Hungarian passenger transport operator MÁV-START Zrt. set into operation the last Stadler FLIRT out of the altogether 60 ordered trains. Stadler Rail Group delivered the last vehicle more than two months before the original deadline agreed in the contract, therefore the delivery part of the MÁV-Stadler contract ended earlier than expected. About Stadler Polska

In June 2006, Stadler Bussnang AG received its first order from Poland for the delivery of fourteen FLIRT trains for the Mazovia and Silesia provinces (ten for Mazovia and four for Silesia) and the maintenance of the vehicles for a period of three years. After having received the order from the provinces of Mazovia and Silesia, the Stadler crew immediately started planning the assembly plant in Siedlce. The company rented and modernised a facility in Siedlce owned by the Polish railway company PKP. As a result, all of the fleet ordered by Stadler's Polish clients was produced in Siedlce. The official opening of Stadler's rail vehicle assembly plant in Siedlce took place on 5 September 2007. As there were no further orders from the Polish market, Stadler started producing GTW for the Dutch market. The roll-out of the first two trains took place with the customer Arriva in September 2009. Stadler Rail Group has invested so far more than EUR 4 million (PLN 16.77 million) in its rail vehicle assembly plant in Siedlce.

#### BOMBARDIER TALENT 2 Trains Ordered for Berlin and Brandenburg

Deutsche Bahn deploys 48 additional flexible vehicle system trains starting December 2011

Bombardier Transportation will supply another 48 TALENT 2 trains to Deutsche Bahn (DB) AG. This recent order amounts to approximately 200 million euros (\$272 million US) and has brought the number of TALENT 2 vehicles ordered by DB up to 176.

The new trains will run on Berlin-Brandenburg's transport network (Verkehrsverbund Berlin-Brandenburg - VBB). They will be operated by DB Regio, which will cover a large part of VBB's transport network using the TALENT 2 trains as of December 2011.

Dr. Klaus Baur, Chairman of the Managing Board of Bombardier Transportation Germany, said: "We are very proud that the TALENT 2 will also contribute to the transportation concept for the capital's new international airport. DB Regio has now ordered 176 trains for service in eight federal states from the framework contract. This shows how well this vehicle system can be adapted to different requirements."

The vehicles for VBB will operate on the routes Magdeburg – Brandenburg – Berlin – Frankfurt/Oder – Eisenhüttenstadt – Cottbus and Dessau – Belzig – Berlin – Wünsdorf-Waldstadt

and later Senftenberg. On the route RE 9 the TALENT 2 trains will also be servicing the capital's new airport, Berlin Brandenburg International.

The fleet consists of 26 three-car and 22 five-car vehicles. They will be delivered between 2011 and 2012. As station platforms within the VBB-network vary, 12 three-car trains and 19 five-car trains will have an entry platform height of 600 mm. The remaining trains will have an entry platform height of 800 mm. Back in February 2007, Deutsche Bahn AG and Bombardier Transportation had signed a framework agreement to supply up to 321 vehicles.

The previous seven call-offs comprising 128 electrical multiple units are intended to be used:

- for the Nuremberg suburban rail network
- on the Moseltalbahn between Koblenz and Trier/Perl
- on the Cottbus-Leipzig route

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- for the Rhein-Sieg-Express between Aachen and Sie gen
- on the Franconia electrical network (E-Netz) between Nuremberg, Bamberg and Würzburg as well as between the cities of Sonneberg, Saalfeld and Jena in South Thuringia
- for the Central Hesse Express on the lines between Frankfurt/Main – Gießen – Treysa/Dillenburg as well as between Hanau – Frankfurt – Gießen
- on the Saxonia line between Dresden, Riesa and Leipzig.

A major feature of the recently developed TALENT 2 Electrical Multiple Unit platform (the 442 series) is its modular concept which includes a high degree of standardisation. The trains offer an almost unlimited level of flexibility in terms of configuration, along with cost-effectiveness and cost transparency. The innovative, modular construction principle allows for countless variants of the same train type. The two- to six-car trains can be equipped with a wide variety of technical modules, depending on whether they are to be used as commuter or regional express trains.

A scalable traction output provided by the BOMBARDIER MITRAC propulsion and control system makes the train particularly energy-efficient and easily adaptable to the frequent acceleration and braking phases in the commuter sector, as well as to the demands of the regional rail network.



## From the UK

## The East Lancashire Railway's DMU Gala

A look at the excellent DMU gala that this popular line held in February. The services were very popular throughout the day, and the weather was kind, providing some excellent photo opportunities.

Well done to all at the East Lancs for continuing to provide excellent entertainment on the dreary winter weekends.

The National Railway Museum's Class 101 power-trailer made an appearance in British Railways green livery at the East Lancashire Railway's DMU gala, the unit, which comprises DMBS 51192 and DTS 56352 is seen here at Summerseat on February 6th. Andy

SPECIAL











## **From the Archives**







