

# Railtalk Magazine Xtra

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 focus on life outside the UK, and once again we have some excellent shots from around the world. Our "From the UK" section this month visits the Severn Valley Railway for it's Spring Steam Gala, which unfortunately ended up being in the middle of winter! Poor passenger loadings were evident on most services as many people either couldn't get or were put off by the bad weather conditions, which was a shame for the line.

Once again our inbox has been filled with some excellent photos this month, I know I continually repeat this, but many, many thanks to all who sent them in to us. We never ever get bored or tired of looking at them. Apologies for a shorter than usual 'From the UK' this month, well we did go to the Severn Valley but the weather conditions were poor to say the least!, but looking through the photos received this month, there does seem to be an increase of sunshine, as Spring gets underway. I wonder would it be too much to ask for me to have nice weather whilst I am on holiday this month? well it probably will.

As always thanks for reading the magazine and remember, if you are going on holiday, don't forget to pack the camera!

#### David

Once again many thanks to the many people who have contributed, it really makes our task of putting this magazine together a joy when we see so many great photos. This issue wouldn't be possible without: Colin Gildersleve, Steve Madden, Brian Battersby, Paul Godding, Richard Hargreaves, Pavel Kopec, Tomáš Kubovec, Martin Grill, Martin Válek, Mark Pichowicz, Richard Weber, Filip Štajner, Pavel Šturm, Bea Želtvayová, Petr Holub, Pavel Martoch, Honza Štofaňak, BVT, Ivo Rušák, Zdeněk, MirKo, Libor Hyžák, Keith Hookham, Jaroslav Charvát, Matouš Vinš, Martin Hill, Steve Dennison, Ian Leech, Anton Kendall, Laurence Sly, Colin Hart, John Coleman, Steamsounds, David Mead, Piotr Kozlowski, Derek Neesham, Roger Williams, Mark Bearton, Andy Pratt, Gary Smith and John Hitchen.

Front Cover: On a freezing cold and very snowy January 16th, DB Class 155.194-4 is seen departing Köln Gremberg with a mixed freight working. *Anton Rendall*This Page: On March 5th, Rheinbraun No. 561 is seen near Hebbelrath. *Mark Bearton* 

### **Contact Us**

**Editor: David** david@railtalkmagazine.co.uk

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

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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.

# Railtalk Magazine Xtra

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Top Right: Ceske Drahy Class 150.210 is seen hauling the Ex127 'Fatra' from Praha to Zilina as it heads through snow covered Luzna-u-Vsetina on January 13th.

Ivo Rušák



Bottom Right: CD Class 460.010 is seen on train No. 3208 as it passes between Vsetín and Jablůnka on March 16th. *Ivo Rušák* 



Below: On March 24th, Class 130.008 heads light engine from Vsetín to Jablůnka. *Ivo Rušák* 









# On March 23rd, Milano Smistamento depot held an open weekend

Right: Some of the FS historic fleet are seen lined up around the turntable during the Milano Smistamento depot open weekend, from left to right, E.656 023, E.645 104, E.626 015, E.428 226, E.646 085, E428 014, E.424 005, D.342 4010 & E.645 023.

Laurence Sly

Bottom Left: D.343 1030 on display at Milano Smistamento. *Laurence Sly* 

Bottom Right: Contrasting liveries on E.656 023 & E.645 014, also on display at Milano Smistamento.

Laurence Sly











Top Right: A RENFE Media-distance Class 599 DMU No. 599.024 is seen at Vigo on January 18th. *Martin Hill* 



Bottom Right: Siemens built Class 252.042 is seen with the RENFE overnight sleeper service to Barcelona at Vigo on January 18th. *Martin Hill* 



Below: On March 4th, Hrvatske željeznice No. 1141-308 slows for the station stop at Sesvetski Kraljevec with a service from Zagreb. Steve Madden













Top Right: DB Class 218.415 departs Schöneck-Büdesheim station at the rear of train No. RE 15538, the 13:44 Frankfurt am Main Hbf - Glauburg-Stockheim service on November 6th. *Andy Pratt* 

Bottom Right: Elderly DB Class 110.432 waits with empty stock at Frankfurt am Main Hbf on November 7th. *Andy Pratt* 

Below: DB Class 218.429 sparkles in the evening sunshine at Frankfurt am Main Hbf on November 6th, awaiting departure time with the combined 16:44 departure to Glauburg-Stockheim and Nidda with Class 218.478 out of sight on the rear of the train. This train works to Bad Vilbel where it divides with the front portion going to Glauburg-Stockheim and the rear to Nidda. However all was not well on this date and 218.429 failed minutes before departure and the Glauburg-Stockheim portion was removed and the train cancelled. Andy Pratt







Top Right: In Slovakia on March 25th, the Mala Fatra mountain range is seen as a beautiful backdrop to Zilina station. *Ivo Rušák* 



Bottom Right: Ceske Drahy Class 380.004 is seen at Vsetin hauling the fast train No. R624 'Portas' to Prague, March 26th. *Ivo Rušák* 



Below: A CD Class 380 is seen crossing the Becva river at Vsacan on March 24th, hauling train No. EX520 from Vsetín to Jablůnka. *Ivo Rušák* 















Top Right: One of FS Trenitalia's huge class of E464 locos No. E464-491 is seen at Verona Porta Nuova station on March 17th. This Bombardier built loco class will total 688 when production finishes in 2013 and the first loco was into traffic as long ago as 1996.

\*\*Gary Smith\*\*



Bottom Right: On March 17th, OBB Class 1216.020 is seen with a rake of OBB stock stabled at Verona Porta Nuova station. *Gary Smith* 



Below: On January 20th, a CP suburban EMU No. 2309 is seen at Lisbon Oriente. *Martin Hill* 











Top Right: Former OBB B-B Class 2050.05 performs a run past for the photographers at Lengau on November 11th, whilst working an Andrew Thompson/Desperate Railtours organised railtour. *Andy Pratt* 

Bottom Right: The Andrew Thompson/Desperate Railtours weekend of tours in the Salzburg area moved to the narrow gauge Pinzgaubahn between Zell am See and Krimml on November 12th. Here ex OBB Class 2095.006, now numbered VS73 is in charge of the train for the full length of the branch. Andy Pratt

Below: Salzburger Lokalbahn V100s Nos. 83 and 84 topped and tailed the Andrew Thompson/Desperate Railtours organised tour of freight lines around the Salzburg area on the afternoon of November 10th. The train is pictured here in the private siding of the Stiegl Brewery. *Andy Pratt* 











Top Right: Comboios de Portugal DMU No. 0468 is pictured approaching Faro from Tavira on February 21st. *Martin Hill* 



Bottom Right: On January 30th, Comboios de Portugal DMU No. 0465 is seen departing Tavira station in the Eastern Algarve. *Martin Hill* 



Below: A RENFE Avant Class 121 DMU is pictured at Santiago de Compostela on February 26th. *Martin Hill* 











Top Right: FS-Trenitalia articulated rheostatic-type electric locomotive Class E656.448 is seen upon arrival into Milano Centrale on March 17th. *Gary Smith* 



Bottom Right: On February 26th, Renfe Class 592 DMU No. 291M is seen stabled at Ourense. *Martin Hill* 



Below: Nederlandse Spoorwegen No. 1709 is seen ready to leave Amsterdam Centraal with the 13:34 service to Hoofddorp. *Steamsounds* 



















Top Right: On January 17th, RENFE's ARCO train with Siemens built Class 252.043-5 at the helm is seen at Leon. *Martin Hill* 



Bottom Right: SNCF BB No. 115019 in multiservice livery is seen at Paris Gare du Nord on January 16th. *Martin Hill* 



Below: DR 99.7245 is seen at Eisfelder Talmühle ready to leave for Nordhausen. <u>Steamsounds</u>













Top Right: Czech Republic based, AWT owned, Class 753.705 and 753.703 are pictured stabled between duties at Zalaszentivan in Hungary on January 9th.

\*\*Andy Pratt\*\*

Bottom Right: Class 478.327 is seen on station pilot duties at Szekesfehervar on a gloomy January 10th. *Andy Pratt* 

Below: Class 418.327 battles through the wintry conditions at Balatonkenese on January 8th, working train No. 9705, the 13:40 Tapolca - Budapest Deli.

Andy Pratt







Top Right: No heat MZ Kennedy Class 661.235 is seen ready to depart Hani I Elezit on February 24th, with the sole daily through train to Skopje. Until recently this train was replaced by a bus between Hani I Elezit and Kacanik due to engineering work in the railway tunnels. However it's now been restored to a train throughout, but still requires a change of train between Macedonian and Kosovan rolling stock at the border station of Hani I Elezit.

**Andy Pratt** 

Bottom Right: Class 110.434-8 awaits departure on the 06:13 Münster - Rheine service on a very cold January 14th. This is one of the last remaining diagrams for this class.

Anton Kendall



Below: Slovenian DMU No. 813-120 approaches the level crossing at Hujbar with a local service, March 8th. Steve Madden



















# Bombardier to Deliver Additional Trains for Singapore Downtown Line

Rail technology leader Bombardier Transportation has announced that in consortium with its Chinese Joint Venture Changchun Bombardier Railway Vehicles Company Ltd (CBRC) it has received an order for 45 driverless MOVIA metro cars from the Land Transport Authority of Singapore (LTA). The order is valued at approximately 119 million Singapore dollars (75 million euro, \$96 million US). Bombardier's share is valued at approximately 46 million Singapore dollars (29 million euro, \$37 million US). Bombardier Transportation owns 50% of CBRC's shares.

Deliveries will form part of the existing contract delivery of the Downtown Line (DTL) project and are expected to end in 2016. The new metro cars will be assembled at the facilities of Bombardier's joint venture, Changchun Bombardier Railway Vehicles Company Ltd, in Changchun, China. With the new order, a fleet of 264 fully automated MOVIA metro cars will run underground on the world's longest driverless mass rapid transit line at 42 km.

"Our MOVIA metros will shape the future of Singapore mass transit travel at a time when many more people in the city are expected to shift to this stylish, efficient and reliable mode of transportation," said Kristian Mikkelsen, President of Rolling Stock Asia, Bombardier Transportation. "We look forward to a long and successful

relationship with LTA and appreciate the collaboration and teamwork demonstrated during the project delivery. We are committed to offering the highest levels of quality, performance and reliability to help improve connectivity on Singapore's rail network. To date, we have delivered five trains within schedule under the DTL project."

Bombardier's expertise as a major supplier of metro cars is evident around the world, with more than 3,900 MOVIA metro cars ordered to date. Every year, Bombardier metros transport more than 7 billion people in cities like New York, Montréal, Toronto, Paris, London, Berlin, Bucharest, Stockholm, Shanghai, Shenzhen, Guangzhou, New Delhi and many others.

The MOVIA metro vehicles integrate the world's most advanced technologies in metro vehicle manufacturing, such as stainless steel carbodies and the reliable BOMBARDIER MITRAC propulsion and control system featuring IP technology. The MOVIA metros are developed from a standardised platform, which ensures a high degree of reliability, safety and maintainability while providing low life-cycle cost. Original, stylish and fully accessible, the MOVIA metro offers values and services that are second to none.

# Stora Enso develops timber transports with Hector Rail

Since 2008 Hector Rail transports timber by rail from Norway to Sweden for Stora Enso. Initially, the volume was approximately 550,000 cubic meters/year. Since then, Stora Enso has expanded Hector Rail's contract on several occasions. Stora Enso and Hector Rail have now agreed to take another big step in the joint development. An additional wagon set and two locomotives enter service. In early May, production will be fully operational at an annual rate of about 1.5 million cubic meters.

The assignment is to run logs from several terminals in Norway to the paper mills Skoghall outside Karlstad and Gruvön in Grums. The terminals in Norway are in Gudbrandsdalen and Østerdalen up to Otta and Tynset. To handle the increasing traffic flows from these forests to the Swedish mills they have chosen to develop the cooperation with Hector Rail.

Hector Rail will substantially enhance the resources in this area by an additional electric locomotive, a diesel locomotive and a wagon set. Several additional drivers will also be recruited. The increase in traffic will begin as soon as possible and will be fully developed in early May.

With the increased volumes for Stora Enso, Hector Rail will in total run about 3.5 million cubic meters of timber annually. This means that Hector Rail is the leading carrier of timber to the Scandinavian forest industry.



# Crash shows just how motor vehicles are no match for trains



Above: Class 418.191 is seen at the head of train No. 2924, the 12:18 Budapest Nyugati - Lajosmizse on January 11th, between Gyal Felso and Gyal stations. Just visible to the right of the train is the remains of a car the train had struck by the train after the car driver had jumped the lights at an ungated level crossing. Fortunately the train was travelling at less than 50km/h at the time of the

collision and the car driver was lucky enough to walk away from the accident uninjured. The same can't be said of his Ford Mondeo, however there was barely a scratch on the front of the MAV diesel. *Andy Pratt* 

Right: A close up shot of the damage to the Ford Mondeo after it's argument with train No. 2924 on January 11th. Andy Pratt



# Alstom and Adif sign an agreement to develop the technology for a third rail signaling system

Alstom and Adif - the Spanish railway infrastructure manager have signed an agreement to develop a new third rail signaling system. The project is part of a framework agreement signed by both actors on November 2012 to carry out R&D projects at Adif's Railway Technology Center in Málaga.

The 5-year agreement also covers mixed gauge railway operations - as well as shared expertise and the exchange of information on scientific activities. The partnership aims to develop innovative, value-added solutions based on this signaling system that can later be sold in the domestic and foreign markets.

To date, 170 kilometers of third rail have been implemented in Spain, 99% of the infrastructure is being developed and implemented by Alstom. The third rail or mixed gauge system is installed inside the existing rails so that trains with international (1.435 millimeters) and Iberian gauges (1.668 millimeters) can run on the same tracks, enabling interoperability between European and Spanish networks.

The solution, which is inexpensive and can be implemented quickly, will be extended along the Mediterranean Corridor of the Spanish lines. Thanks to this technology, the Mediterranean freight Corridor is expected to be operational by 2015.



While third rail technology does not require large investments in infrastructure, it requires new signaling systems and overhead power cables. This groundbreaking technology developed in Spain can also be exported in other countries facing the same challenges, such as Portugal or former Soviet republics (Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldavia, Russia, Tajikistan, Ukraine and Uzbekistan).

"Dual gauge technology helps the railway sector to cross borders and overcome technical barriers in a clever and efficient way. It is already in operation in Spain, showing its reliability and viability for large-scale implementation in all the countries that, like Spain, have different gauges", says Antonio Moreno, Alstom Spain Country President.

# The Málaga Railway Technology Centre, a leader in technological innovation

Adid's Malaga Railway Centre is intended to serve as an open space for the promotion of innovation and business collaboration focused on technological development for railway systems through R&D projects. The Centre already boasts 37 leading technology companies operating in sectors such as telecommunications, signalling and railway superstructure, construction and civil engineering works, railway rolling stock, energy and sustainability.

### R&D at ADIF

ADIF's strategic objectives include increased cooperation with public and private entities in research, development and technological innovation in its potential priority business areas, as well as R&D&I projects promoted by Spain and the European Union through the R&D&I Framework Programme. To achieve these goals, AFID has set up a Railway Technology and Research Centre in Málaga and plans to build specific auxiliary facilities for testing and experimentation to complement the main facilities.

# Hector Rail buys 42 passenger coaches for 200 km/h

Since 2007 Hector Rail provides traction for passenger trains in Sweden. Hector Rail has in recent years invested in seven locomotives approved for up to 230 km/h. More and more service providers are exploring opportunities in the fully liberalized Swedish rail passenger market. Hector Rail has decided to extend its offering from traction only to whole train sets approved for 200 km/h. Used coaches purchased in Holland can be upgraded according to a service provider's requirements.

Hector Rail will not enter the rail passenger market themselves. The intention is to offer a complete train system to a service provider who is interested in not only creating a cost-effective, but also a fast and comfortable travel market offering. The technical standard and interior can be adapted on the targeted passenger market segments.

The concept of locomotive and coaches means lower overhead costs compared to multiple units that increasingly have become the standard for passenger trains. Locomotives and coaches also offer more opportunities to vary the train size according to demand. Maintenance costs and complexity can also be reduced.

The purchased coaches were originally built in Germany, where they were used for long-distance traffic at 200 km/h. During the last ten years, the coaches have been used for traffic in the Netherlands. Hector Rail's locomotives for passenger traffic have an effect of more than six million watts, which is almost twice as much as existing passenger locomotives or X2000 trains. This means faster acceleration and ability to maintain a higher average speed.

# DB Schenker Rail transports Swedish paper products for ScandFibre Logistics

On behalf of the Swedish logistics company ScandFibre Logistics, DB Schenker has been handling shipments to Germany, Austria and Eastern Europe since March 1 for ten Swedish paper mills. Seven trains are scheduled to run each week. This means that around 12,000 railcars transporting 500,000 tons of paper from Sweden will be hauled by DB Schenker Scandinavia across the Öresund Bridge and back each year, with 120,000 tons in return loads for customers in other business sectors. In Sweden, the trains will be hauled by the Swedish rail freight carriers Green Cargo and Hector Rail.

As Europe's largest rail freight carrier, DB Schenker Rail is now one of the key service providers in the "Rail 11" rail-based logistics concept operated by ScandFibre Logistics. As a result of the new cooperation arrangement, railcar turnaround times have been reduced and shipments can be adjusted to fluctuations on the market at short notice. "Our re-started partnership with DB Schenker Rail on the European continent will increase the effectiveness of our Rail 11 logistics concept," said Mats Erkén, Managing Director of ScandFibre Logistics. Axel Marschall, Member of the Management Board for Sales at DB Schenker Rail, is equally confident. "Together with ScandFibre Logistics, we are systematically expanding our European network and are a reliable partner for the paper industry."

# in Negotiations to Acquire Veolia Transdev Central Europe

Deutsche Bahn AG confirms that it is currently in negotiations for the acquisition of the Central Eastern European business of Veolia Transdev (Veolia Transdev Central Europe). The acquisition is still subject to approval by the Supervisory Board of Deutsche Bahn AG and by the relevant merger control authorities. Detailed information on the acquisition will be published if negotiations are concluded successfully.

Veolia Transdev Central Europe operates regional bus transport in six Central Eastern European countries (Croatia, Poland, Serbia, Slovakia, Slovenia and the Czech Republic). DB Arriva, Deutsche Bahn's subsidiary responsible for regional transport outside of Germany, operates bus and rail transport in twelve European countries. These include the Central Eastern European markets in Poland, Slovakia, the Czech Republic and Hungary.

# Stadler flirting in Serbia



Serbian Railways (ŽS) has ordered 21 electric FLIRTs (Fast Light Innovative Regional Train) from Stadler Rail for commuter rail services in the Belgrade region. The contract worth around EUR 100 million was signed recently in Belgrade. The order is being financed by the European Bank for Reconstruction and Development (EBRD) in London. The vehicles will be delivered in two-week intervals between autumn 2014 and late summer 2015. The trains are very environmentally friendly due to their low energy consumption.

At the headquarters of ŽS in Belgrade, Dragoljub Simonović, Executive Director of ŽS, and Peter Jenelten, Executive Vice President Marketing & Sales at Stadler Rail, signed the contract for the procurement of the 21 new trains. The trains ordered are latest-generation four-carriage FLIRTs. Based on the FLIRT, which has sold over 800 units over the last 10 years, Stadler has developed the next generation, FLIRT3. This latest range of trains is made up of various modular sub-ranges. Peter Jenelten is very pleased about the order: "We are proud that we were able to win this EBRD-financed invitation to tender. The new FLIRT trains will allow ŽS to set new standards in regional transport. And it is our first FLIRT order in South-Eastern Europe."



# Comfortable and environmentally friendly

The trains have an electric drive for a voltage of 25 kV, 50 Hz. The maximum speed of the modern trains is 160 km/h, and they can be used for three-way traction. The carriage areas can all be accessed without steps and have 234 seats, including 14 tip-up seats and 12 seats in 1st class. The FLIRTs incorporate spacious multifunctional compartments in the entrance area for wheelchairs, prams and bicycles, a wheelchair-accessible toilet and air-conditioning. Emergency intercoms allow passengers to contact the driver. The trains will initially have an Indusi train control system, with a subsequent upgrade to the European ETCS 2 standard included at the planning stage. The vehicles are made of lightweight aluminium and are therefore low in weight. This means they can accelerate faster, thus significantly reducing energy consumption and operating costs in comparison to conventional vehicles.

# Tailored to customer requirements

Each of the four bodies has one passenger door per side to meet the requirements of Serbian Railways. This highlights one of the real strengths of the FLIRT3 concept: the number of doors and various other features can be adapted variably to meet the customer's requirements. The first units will be delivered in autumn 2014. Ten weeks after the delivery of the first vehicle, the remaining 20 trains will be delivered in two-week intervals. Thus, the last vehicle will arrive in late summer 2015.

# Record number of passengers in Deutsche Bahn trains

Revenues, profits and capital expenditures rise anew in 2012 • Debt level reduced • Highest level of new hires in ten years with 11,000 new employees just in Germany alone • DB CEO Grube: "We are on the right track with our DB2020 strategy"

Train travel is becoming increasingly popular in Germany. Deutsche Bahn set a new passenger record in 2012 as the total number of passengers traveling via domestic rail transport rose by 49 million. Over the course of the year DB transported a total of 1.97 billion passengers (excluding Arriva). This figure is even more notable as the number of airline passengers on domestic flights declined by 3.8 percent during the same period of time while registrations of new cars in Germany fell by 2.9 percent. In contrast, the winner is the transport mode rail which grew by 4 percent. DB also increased its revenues and profit again in the financial year 2012. Revenues rose by € 1.4 billion (+3.7 percent) over the same year-ago period to € 39.3 billion, while the adjusted EBIT figure increased by € 399 million (+17.3 percent) to € 2.7 billion in 2012. Net capital expenditures grew by 35.7 percent, or € 918 million, to € 3.5 billion. Net financial debt was cut by € 226 million (-1.4 percent) to € 16.4 billion.

DB hired about 11,000 new employees last year just in Germany alone. This figure was the highest number of new hires noted in the past ten years.

During the presentation of the 2012 annual results in Berlin, Dr. Rüdiger Grube, CEO and Chairman of the Management Board, stated: "More revenues, more profit, more capital expenditures and, above all, a new record number of passengers in our trains. All of these figures show that with our new DB 2020 strategy we are on the right track for success."

Dr. Richard Lutz, DB CFO, noted: "All our business units are profitable. DB Schenker Rail Germany completed its turnaround despite a difficult economic environment. Even if some uncertainties remain for 2013, we remain cautiously optimistic for the current year."

# Passenger transport business posts higher volumes sold

DB's rail passenger transport business not only recorded more passengers, it also posted an increase in its volumes sold, which rose in 2012 by 4 percent, or 3.1 billion passenger kilometers (Pkm), to 82.4 billion Pkm (excluding Arriva). The number of bus transport passengers in Germany fell again. The 4.1 percent decline in passengers transported to 725.4 million was due to the shrinking number of school children.

# Uneven results at transport and logistics

DB's rail freight transport business faced major challenges, including structurally related issues, last year. Volumes sold in the rail freight transport segment contracted by 5.4 percent to 105.9 billion ton kilometers due to weaker economic conditions. Development was uneven at DB Schenker Logistics as the volume of shipments transported in the European land transport segment remained almost unchanged and declined marginally over the course of the year by 0.5 percent. The volume of air freight shipments weakened by 4.7 percent while the ocean freight segment posted an 8.1 percent increase in shipping volumes. The dynamic pace of growth noted for the contract logistics area of business remained intact as revenues surged by 17.7 percent.

## Infrastructure: track kilometers and station stops remain generally stable

Demand for train-path was also affected by economic developments and fell by 1.1 percent to 1.0 billion track kilometers, which was slightly less than the all-time high figure posted in the previous year. Non-Group railways were able to increase their share by 4.9 percent to currently 22.2 percent of total demand for train path. The number of station stops rose by 0.8 percent in 2012.

# Alstom and Kamkor to produce 10,000 point machines in Kazakhstan

Stadler trains for four rail companies in Western Switzerland



The joint venture, KazElectroPrivod, equally owned by Alstom and its Kazakh partner Kamkor, has signed a contract worth €90 million with Kazakhstan Temir Zholy (KTZ), the Kazakhstan national railway company, for the supply of 10,000 point machines over a 10-year period starting in 2013. The point machines, which allow a train to change tracks, are essential in any rail network. The contract was signed recently in the presence of the French Foreign Minister, Laurent Fabius, during his visit to Astana.

In January 2013, Alstom and Kamkor, an industrial subsidiary of KTZ in charge of rolling stock maintenance, created a 50/50 joint venture specifically for the production of point machines. The KazElectroPrivod joint venture will be based in Almaty, in the south of the country, at the Almaty Wagon Repair Plant, owned by Kamkor and specialised in railway maintenance activities. The first point machines will be imported from Alstom's plant in Bologna (Italy), while the existing workshop is rebuilt to suit the needs of the new production. The production of a large share of components will be gradually localised, following Alstom's strategy to geographically expand to get closer to its customers.

Two units of Alstom P80 point machines have been operating successfully for two years at the Astana railway station and have proven to be reliable and suitable for Kazakhstan. The Alstom point machines require very little maintenance. Their mechanism is

protected from ice and snow and does not require heating, which makes them very suitable for operation in severe weather conditions.

"With this first signalling project for Alstom in Kazakhstan, we are gaining a foothold in the promising Kazakhstan signalling market, and to a larger extent, in the neighbouring markets as well", said Bernard Gonnet, Senior Vice President of Alstom Transport in the CIS. "Our point machines are proof of Alstom's commitment to bringing the best product and modern technologies to the transport market in CIS".

With 14,000 km of track, the Kazakh railway network is the world's third longest using the 1,520 mm track gauge (Russia and CIS) and represents a substantial market for point machines. This Alstom signalling equipment could also serve other CIS countries.

Alstom and KTZ already share substantial projects in Kazakhstan. In December 2012, KTZ and the Alstom-TMH consortium

inaugurated their recently-built plant for the production of electric locomotives. The plant will produce the 295 electric locomotives ordered by KTZ, starting in 2013. In October 2012, KTZ awarded Alstom the first service contract for full maintenance, major overhaul and modernisation of 27 KZ4AC passenger locomotives for a 25-year period.



# ADIF concludes modernization work at Pineda de Mar (Barcelona)

ADIF has completed the modernization and improvement of accessibility at the station of Pineda de Mar Barcelona, located in the conventional line from Barcelona to Mataró and Maçanet de la Selva.

This action, which represents an investment of 2,964,180 euros (VAT included), has involved the construction of a new pedestrian underpass equipped with elevators, expansion and reorganization of the platforms and improvements in passenger building, parking and environment of the station.

The new underpass, which has a width of 3.7 m, is equipped with lifts for up to 8 people to facilitate access for people with disabilities. Its construction has allowed the elimination of the step surface to be used for transit between platforms.

The rail companies Transports de la région Morges–Bière–Cossonay (MBC), Transports Vallée de Joux Yverdon-les-Bains Ste-Croix SA (TRAVYS), Compagnie du Chemin de fer Montreux Oberland Bernois (MOB) and Transports publics fribourgeois (TPF) have awarded the contract for 17 new trains to Stadler Bussnang AG. The first vehicles will be delivered in early 2015. The order is worth a total of CHF 150 million.

On 24 August 2012, the four rail companies MBC, TRAVYS, MOB and TPF joined forces to issue an invitation to tender for the purchase of rail rolling stock. As they had all reached the same point in their train renewal cycles, the four companies, which operate narrow-gauge services in the cantons of Vaud, Fribourg and Berne, came together for a procurement contract including a list of specifications that could meet the needs of all the companies involved.

This collaboration proved very interesting in terms of exchanging experiences. It improved the efficiency of the technical approach and achieved significant economies of scale (CHF 28 million less than separate purchases). It also opened up prospects of synergies in terms of the maintenance and servicing of the hardware in the future. Plans for sub-contracting in Western Switzerland

The contract awarded to Stadler covers the acquisition of 17 trains for a total of CHF 150 million, in addition there are options totalling CHF 80 million. The winning company was selected on the basis of a very strict specifications document that focused on the priority of the financial aspects of the tender and the guarantees in terms of quality, service and deadlines. Stadler Bussnang AG was best across all the criteria. The whole process was carried out in accordance with the rules for procurement contracts, with MBC acting as the legal representative. The winning company will sign separate contracts with each firm. Where possible, it will use regional sub-contractors, as it already does regularly. The new trains comprise two or three elements and will be delivered in stages between January 2015 and July 2016, in line with the companies' operational plans.

Four trains are going to MOB to replace four 4000-series locomotives dating back to 1968, as part of the Montreux-Interlaken project.

Four trains are for MBC to replace model units dating back to 1981 and to provide a half-hourly service between Bière and Morges as of December 2015.

Of the three new trains destined for TRAVYS, two will replace stock nearing the end of its service life and the last one will allow the introduction of a half-hourly service between Sainte-Croix and Yverdon-les-Bains. Finally, TPF needs six trains to replace four old trains and provide services as part of the development of the Fribourg commuter railway service. This new decidedly modern equipment will guarantee high levels of passenger comfort and safety. In 2011, the four companies transported 38 million passengers and turned over a total of CHF 220 million. They employ a total of 1,350 people.

The work also entailed the demolition of the central platform located between tracks 1 and 2, the movement of the track in the direction of Maçanet Barcelona and building a new platform, which has a useful length of 200 m, a width average of 4 m and a height of 68 cm above the rail height, which provides a safe and comfortable access to the trains.

Thus, and as in the series of actions that are taking place in the Barcelona commuter network, ADIF reaffirms its commitment to improving the services offered and the comfort and safety of passengers



# Good result in difficult environment – debt stabilised: SBB improves result – stagnating demand for rail transport.

In 2012, SBB achieved a good result in a challenging market environment. Every day it carried 967,000 passengers and around 175,000 tonnes of freight safely and punctually to their destination. The company provides its services to more than 5 million customers on the world's most densely used rail network and in heavily frequented stations. The operating result declined as a result of falling demand for passenger services and higher train path prices. One-off effects pushed consolidated net income up to CHF 422.5 million (+ CHF 83.8 million). Although reduced, interest-bearing debt remains high. SBB's good consolidated net income will help it to absorb the still soaring financial liabilities arising from train path and energy prices.

2012 was a year in which a weaker economy, strong Swiss franc, reduced industrial capacity and declining demand from tourists combined to create a challenging environment for SBB. As a result, it experienced stagnating demand for its rail services. The company carried 967,000 customers every day, slightly fewer than 2011's figure of 977,000. Since the distances travelled by passengers fell by 1.2 percent compared to the previous years, passenger-kilometres declined from 17,749 million to 17,545 million. This is because services were not significantly expanded during 2012.

Subsidised regional services continued to grow, increasing passenger-kilometres by 1.6 percent to 4,620 million. In contrast, traffic volumes on self-financing domestic long-distance services fell by 2.1 percent to 12,925 million passenger kilometres. Leisure and tourist travel in particular were down, while commuter and business travel continued to grow, albeit less strongly than in previous years. Passenger-kilometres increased by around 6 percent on international passenger services, above all on the Zurich-Paris route and the Rhine valley route to Frankfurt and other destinations in Germany.

SBB Real Estate benefited from the high passenger numbers and associated demand for prime real estate in central locations with excellent public transport links.

One example is the development project in Zurich's Europaallee, where SBB inaugurated the first phase in September.

Freight services had to contend with the economic slump that is affecting the whole of Europe and the reduction of industrial capacity in Switzerland, particularly in the paper and metalworking industries. This situation was compounded by the closure of the Gotthard mountain route on three occasions due to rockslides near Gurtnellen. As a result, the Freight Division posted an operating loss. SBB Cargo reported a 1.7 percent drop in freight traffic in 2012, to 12,132 million net tonne-kilometres. SBB responded to these challenges by systematically gearing its freight services to the rail system's strengths.

Usage of SBB Infrastructure's network intensified again somewhat in 2012. Train-path kilometres increased slightly once more, rising 0.3 percent to 165.6 million. SBB Infrastructure intensified maintenance activities on the rail network. The backlog was stabilised as planned and now totals CHF 1.815 billion

(+ CHF 35 million). A total of 160 kilometres of permanent way was renewed in 2012 (2011: 150 kilometres) and productivity was increased by extending fixed maintenance intervals. SBB also equipped the first of around 11,000 locations with ETCS, the high-tech European Train Control System.

# Slight increase in earning power

Although demand for rail transport services stagnated overall, SBB performed better in 2012 than in the previous year. Consolidated net income for 2012 came in at CHF 422.5 million (2011: CHF 338.7 million). The result was bolstered by one-off effects and reversals of provisions totalling CHF 93 million. Adjusted for these one-off effects, however, earning power improved only slightly on the previous year. Consolidated net income was boosted by the financial result, as the reduction in interest-bearing debt lowered the financing requirement.

The positive consolidated result gives SBB a foundation from which to manage its financial liabilities, which will continue to rise rapidly. Train path prices will increase further in 2013 and subsequent years, pushing up SBB's costs by around CHF 250 million. In addition the costs of producing renewable energy are rising, as are interest costs. The increase in train path prices is needed to pay for the backlog in and increased requirement for rail infrastructure maintenance.

### **Investing in customers**

Last year, SBB substantially increased its investments in improvements for customers to CHF 3,206.6 million (2011: CHF 2,490.9 million/+ 28.7%). This is attributable to specially financed public-sector investments such as the Zurich cross-city line or the joint Franco-Swiss link between Geneva and Annemasse (CEVA) on the one hand, and major investments in rolling stock on the other.

Free cash flow after public-sector funding came to CHF 905.8 million (2011: CHF -5.2 million). This is primarily due to the sale of financial assets and real estate as well as a further improvement in cash management. Delays to rolling stock deliveries and individual real estate projects also brought temporary relief. Thanks to its improved free cash flow, SBB was able to reduce interest-bearing net debt. However, interest-bearing net debt remained high at the end of 2012, at CHF 6,841.9 million (2011: CHF 7,494.4 million).

# Enhancing rail travellers' safety

Although safety performance was good in 2012, it fell short of the very good levels achieved in previous years. Safety was marred by several accidents, in which two SBB employees and four employees of contractors lost their lives. In recent years, SBB has made a major commitment to reinforcing its existing, highly effective safety systems at critical places by installing additional speed supervision equipment. This commitment has resulted in an upgrade programme, during which 3,200 of the 11,000 main signals in service on the network have already been fitted with speed supervision equipment. A further 1,700 are due to be upgraded over the next few years.

A further growing challenge facing SBB is that of protecting passengers and employees against acts of violence. Violence is becoming more commonplace throughout society and the railways are not immune to this development. SBB therefore always deploys two conductors on each of its long-distance trains. The transport police is well equipped and a visible presence at stations and on trains. Prevention activities have also been stepped up.

As regards punctuality, connection rates rose once more in 2012 from 97.7 to 98.3 percent. Although customer punctuality, i.e. the proportion of travellers who arrive at their destination on time or with a delay of less than three minutes, failed to match 2011's record level of 89.8 percent, it declined only slightly to 88.0 percent.

SBB further strengthened its commitment to conserving energy and cutting carbon emissions in 2012. The effect of energy-saving measures implemented to date rose from 145 Gigawatt-hours (GWh) to 183 GWh per annum. This saving corresponds to the annual energy consumption of 9500 households. Thanks to good water levels, hydroelectric sources already accounted for an impressive 83.5 percent of the power used by SBB in 2012. CO2 emissions were reduced by about 12,000 tonnes by comparison with 2009. This corresponds to the emissions from over 1800 households. By tending line-side embankments and woodland, moreover, SBB is doing a great deal to promote biodiversity.

## Further service expansion in the period up to 2016

In the period up to 2016, SBB will be doing the groundwork in preparation for subsequent years. Over the next few years, customers will benefit from progressive improvements in services. Infrastructure projects and new trains will provide the foundation for doing so. SBB will be deploying new double-deck trains on regional and long-distance services and modern ETR 610 units on services to Italy as replacements for the ageing ETR 470s. It will also be putting new trains into service on further international routes.

The company will also be completing major real estate projects such as Europaallee in Zurich, Südpark in Basel, La Praille and the rejuvenation of Geneva's Cornavin main station. 2014 will see the opening of the first stage of the Zurich cross-city line, a project of both regional and national importance, and also of the rail link between Mendrisio in Ticino and the Italian town of Varese. The cross-border route between Geneva and Annemasse (CEVA) will commence operations in 2017.

The eyes of the world will be on Switzerland for the opening of the Gotthard Base Tunnel. For SBB, the new tunnel will mark a major milestone as it equips itself for the future. The Gotthard Base Tunnel will reduce journey times between northern and southern Switzerland and permit the transfer of traffic from road to rail. From an international perspective, the event is a unique opportunity for Switzerland to present public transport as the embodiment of the country's values of reliability and innovation.

























