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Submissions

Should you fancy getting involved with the magazine, then please send any photographs, videos or articles, to us at the below email address:

entries@railtalk.net

Please include a detailed description and credits of the author.

From the Editor...

Welcome to another edition of Railtalk Xtra, and another fantastic month for photos, including some from unusual locations. Well personally I never thought that we would have any photos from Senegal!

Just as I was about to publish this months issue, news came in that the popular Chochen. tv has had to cease transmission due to a request by Czech Railways citing Security as an issue. I really hope that this is only a temporary setback and it isn't the start of a more Europe wide clampdown on railway webcams. The main news this month though has to be the likely introduction of the 'guaranteed seat' on SNCF Intercités services, meaning in the future they will be subject to compulsory reservation the same as TGV and Teoz. This will allegedly help manage complaints about overcrowding especially where new rolling stock provides less capacity than the current corail stock. This will end the concept of 'turn-up and go' and will allow the introduction of airline type 'yield management' pricing structures. A great tragedy in my opinion for rail travel and as for prevention of overcrowding, how about longer trains, or at least ones that are not shorter than those being replaced.

As always a huge thanks to everyone who have sent in photos this month, please keep them coming as it makes our job even more enjoyable and as always don't forget to take the camera on holiday with you!

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. These issues wouldn't be possible without: John Aldborough, John Balaam Robert Bates, Brian Battersby, BVT, Mark Bearton, Mark Bennett, Steve Dennison, Tim Farmer, FrontCompVids, Paul Godding, Richard Hargreaves, Dave Harris, Brian Hewertson, Martin Hill, Keith Hookham, Colin Irwin, John Johnson Anton Kendall, Michael Lynam, Steve Madden,David Mead, Chris Perkins, Mark Pichowicz, Andy Pratt, Tim Proudman, Railwaymedia, Laurence Sly, Gary Smith, Steamsounds, Mark Torkington, Tim Ward and Andrew Wilson.

Front Cover: ÖBBs Class 1144 241-7 works a mixed freight through Villach West on April 10th. Anton Kendall

This Page: As the sun sets on the Tatra mountains, ZSSK's Class 731.034-5 is seen shunting wagons through Poprad-Tatry station. Class47

Pictures

Ceske Drahy's Class 163.094 passes Střekov Castle on the east bank of the River Elbe whilst working train No. Os6413 14:03 Ústí nad Labem Zapad - Lysa Nad Labem on April 29th.
Laurence Sly

On May 1st, SBB's Class 482.044 waits in the loop at Kurort Rathen whilst hauling a southbound freight train. Laurence Sly

CD Cargo Class 122.014 passes Brná nad Labem whilst hauling a southbound mixed freight on April 29th. Laurence Sly

Alex Class 183.002 arrives into Regensburg Hbf. working a service from München Hbf. Class47

An FS Frecciabianca (White Arrow) passes through Rubiera station while Ferrovie Emilia Romagna (FER) owned, former German V200, No. 220.074 waits to trip it's next liner train down the branch to the local container terminal on May 19th.
Andy Pratt

Lokomotion Class 185.666-2 leads 186.282-0 on an Ekol intermodal service through Villach Warmbad on April 9th, heading for Italy. The locos will work as far as Tarvisio Boscoverde and return to Austria later in the day. Anton Kendall

Hunter DMU No. 2703 sits in the platform at Hamilton having just terminated with a service from the Maitland direction. Anton Kendall

On June 3rd, CD Cargo's Class 240.139 and another class member are seen shunting at Plzen. Class47

ITL's Class 185.548 crosses the viaduct at Königstein whilst hauling a northbound train of tanks on May 1st. Laurence Sly

A FS Frecciarossa (Red Arrow) service is captured on the Italian High Speed Line approaching Bologna on May 20th.
Andy Pratt

ÖBB's Class 1064.007 heads through Wien Grillgasse on May 28th. Keith Hookham

On June 6th, Plzen based Class 754.027-1 is seen departing Praha hl.n. working a Ceske Budejovice service vice Class 854 unit. Class47

Meridian No. 1427.001 works a Holzkirchen - München Hbf service into München Hbf on April 8th. Because of storm damage, these units were not running through to Rosenheim on this date. Anton Kendall

On June 16th, CFR Class 62-0693 stands at Satu Mare with the 15:00 service to Debrecen which it will work as far as the Hungarian border. Tim Farmer

Ceske Drahy's Class 371 005 passes Kurort Rathen whilst working train No. EC173 06:14 Hamburg Altona - Budapest Keleti on May 1st. Laurence Sly

Scotch liveried Slovenian Class 541.001 works a Villach Hbf - Ljubljana service through Villach Warmbad on April 9th.
Anton Kendall

CD Cargo's Class 122.021 approaches Litomerice whilst hauling a southbound coal train on April 29th. Laurence Sly

On June 7th, Class 740.732-3 is seen at Praha hl.n. with an engineering train which was carrying out work in the station.
Class47

ZSSK Class 240.136 stands at Bratislava Vinohrady on May 29th working train No. R723 10:55 Bratislava hl. st. - Leopoldov.
Keith Hookham

Class 193.220-1, working for Lokotrain, appears between ZSSK locos Nos. 240.043-0 and 362.001-0 at Bratislava hlavna stanica on April 13th. Anton Kendall

Pacific National No. TT130 leads No. 9214 and No. TT05 on an empty coal working from Kooragang down the grade at Metford.
Anton Kendall

A Ceske Drahy ‘Pendolino’ passes Hořovice whilst working Train No. SC506, 13:14 Ostava hl.n. - Cheb on April 28th.
Laurence Sly

MAV Class 431.014 is photographed at Bratislava Vinohrady, arriving on train No. R722 10:21 Leopoldov - Bratislava hl. st . on May 29th. Keith Hookham

DB Class 140.490-4 heads a container train through Hamburg Harburg, heading for Aachen. Class47

ÖBB Class 1216.012-5 heads train No. EC85 09:38 München Hbf - Bologna through Kufstein on a murky April 18th.
Anton Kendall

On June 9th, IDS's Class 749.181-4 is seen stabled at Usti nad Labem Strekov with a couple of fuel tanks. Class47

A pair of CrossRail Class 185s round Wattinger Kurve on June 2nd. Laurence Sly

Ceske Drahy Class 163.079 passes Brná nad Labem whilst working train No. Os6409 10:03 Ústí nad Labem Zapad - Lysa nad Labem on April 29th. Laurence Sly

Glencore's No. XRN002 leads XRN006 and XRN021 up the grade at Thornton on an empty coal working from Kooragang.
Anton Kendall

Left: On May 18th, No. CC1504 calls at the old fashioned station of Rufisque with a train to Dakar. Mark Torkington

Main: No. CC1501 (an exported Indian YDM4) departs from Hahn station with a morning commuter train from Dakar to Thiaroye on the small Petit Train de Banlieue network (PTB), May 16th. Mark Torkington

DB Class 111.130-1 stands at Regensburg Hbf. on June 3rd, with an early morning ECS working. Class47

FUC operated Class 190.302-6 works the 09:45 Villach Hbf - Udine international stopper service through Villach West on April 10th, passing SETG operated 193.812-5 and 193.204-5 which have stabled after working from Wien. Anton Kendall

Class 82-0446 stands at Razboieni on June 11th ready to work the 16:35 service to Târgu Mureş. Tim Farmer

Looking for all intents and purposes that it is about to take it's train on a main line run, unfortunately former German V200, FER owned Class 220.074 is only shunting it's train onto the running line so that it can propel it back into the container terminal at Rubiera on May 20th. Andy Pratt

ZSSK Cargo's Kia Motors branded Class 771.093-2 heads a rake of empty car carriers through Zilina on June 5th. Class47

On May 27th, QR National No. LDP004 leads LDP002 on a Melbourne - Brisbane intermodal working down the grade at Metford. Anton Kendall

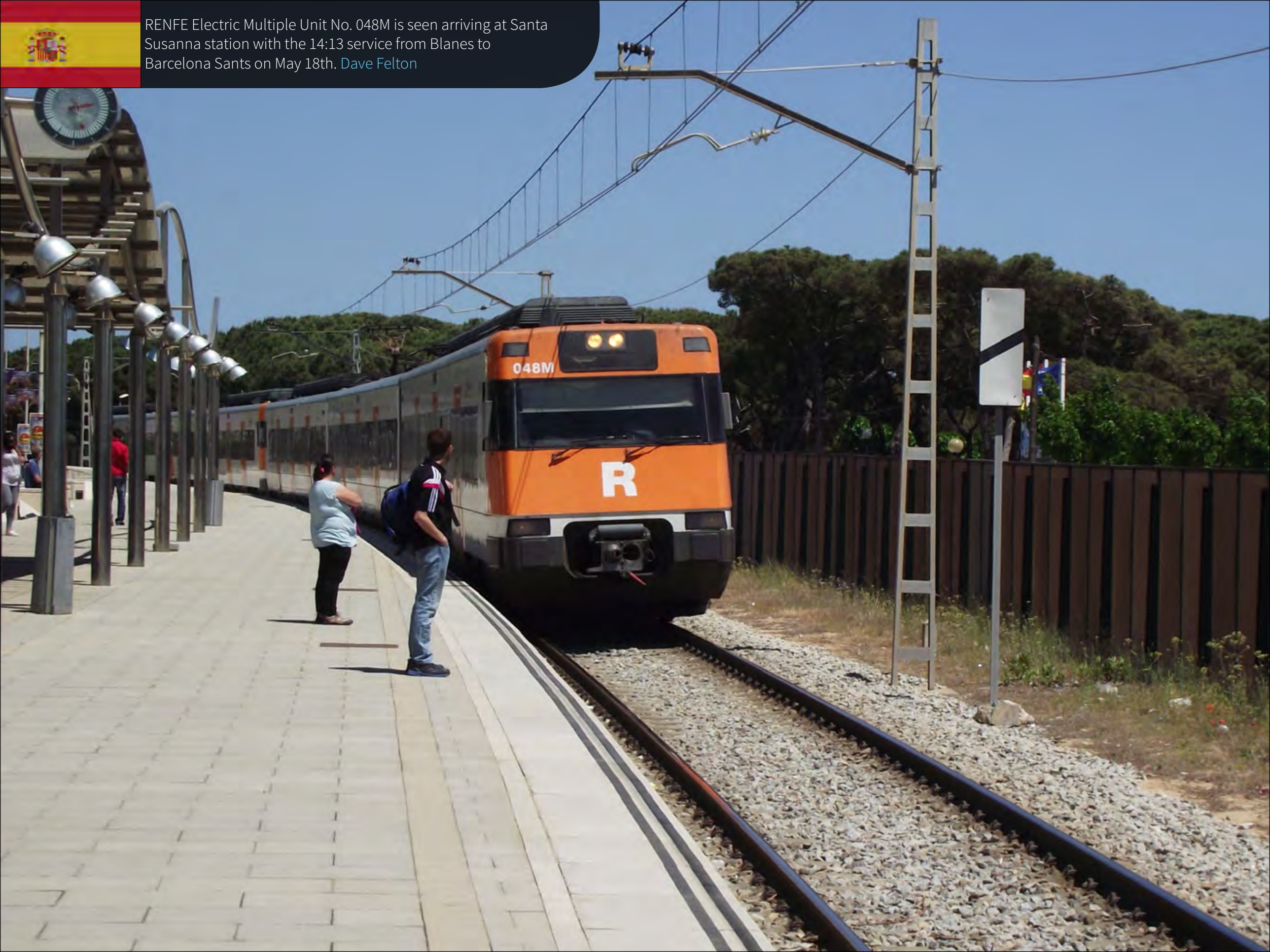
Crossrail's Class 185.594 and 185.590 approach Gurtnellen whilst hauling a southbound container train on June 1st.
Laurence Sly

ZSR's Class 757.005 arrives into Banská Bystrica on June 5th, working a Zilina to Zvolen service. Class47

An SBB Class 460 crosses the viaduct at Eglisau whilst propelling train No. IR2882 18:05 Zurich HB - Schaffausen on May 31st. Laurence Sly

AZD operated Class 165.001 (formerly 851.026) is seen at Kolin on June 10th. Paul Godding

SBB Class 420.202 departs Erstfeld whilst working train No. IR2313 07:04 Basel SBB - Locarno on June 1st. Laurence Sly



RENFE Electric Multiple Unit No. 048M is seen arriving at Santa Susanna station with the 14:13 service from Blanes to Barcelona Sants on May 18th. Dave Felton

Former DB, now owned by TSS, Class 180.015-0 is seen stabled at Decin hl.n. on June 6th. Class47

SBB Re 4/4 II No. 11136 passes Wassen whilst working train No. IR2414 06:11 Chiasso - Zurich HB on June 2nd. Laurence Sly

XPT power car No. 2004 leads No. 2007 through Thornton with the morning Sydney - Brisbane working on May 28th.
Anton Kendall

SD operated Class 130.046-6 heads a coal train through Lovosice on June 11th. Paul Godding

On May 20th, FS Class E656.575 will be first away from Rubiera with it's liner train while E652.088 will depart shortly after.
Andy Pratt

DB Class 189.010-2 heads a container train along the banks of the Elbe on June 9th, heading for Dresden. Class47

Early Morning sun catches No. 62-0759 at Târgu Mureș waiting to leave on the 07:30 service to Deda, June 12th. Tim Farmer

CFR No. 62-0630 leaves Reghin working the 10:55 Târgu Mureş – Braşov stopping train on June 12th. Tim Farmer

Rhb No. 644 stands at Chur with the 17:58 service to St. Moritz.
Steamsounds

DB Class 182.016-6 (in VVO advertising livery) arrives into Pirna with a terminating service from Dresden. Class47

Right: Irish Rail DMU No. 29119 is pictured stabled between services at Dublin Connolly on May 20th. Michael Lynam

Main: GM 071 Class No. 0117071 passes through Dublin Connolly with a weed killing train to Bray Halle tram on May 20th. Michael Lynam

Below: On May 20th, Irish Rail DMU No. 29423 departs Connolly en route to Dublin Pearse Station. Michael Lynam

Right: Irish Rail GM Class 201 No. 222 is seen stabled on Cork depot, May 19th. Michael Lynam

Main: Irish Rail GM Class 201 No. 215 arrives into Cork on May 19th with a service from Dublin. Michael Lynam

Below: On May 19th, Irish Rail DMU No. 2602 stands at Cork in between services to Cobh. Michael Lynam

DB Regio DMU Class 620.009 calls at Bonn Hbf whilst working a service to Ahrbrück. Steamsounds

Former BR Class 86 248, now working with Hungarian operator 'Floyd' as No. 0450.001-7, is seen stabled at Debrecen on June 16th. Tim Farmer

SZDS Class 140.076-1 stands at Kosice with a rake of tank wagons on June 4th. Class47

On June 6th, to celebrate the 30th anniversary of KZC, a special train ran from Praha Masarykovo to Lovosice top'n'tailed by Class 749.253 (running as T478.1215) and 749.259 (running as T478.2065), pictured here during one of the photo stops. Class47

DB Class 218.404 and 218.423 stand at München Hbf with train No. EC197 to Zürich HB. Steamsounds

Right: Mainz tram No. 222 is seen leaving the Hauptbahnhof with a service to Finthen Roemerquelle. John Balaam

Main: Halle tram No. 641 heads along Delitzcherstrasse with a service to the Hauptbahnhof. John Balaam

Below: Hannover trams Nos. 6175 and 6176 are photographed in Joachim Strasse. John Balaam

Skoda built Brno tram No. 1927, in Brother advertising livery, heads past Hlavní Nádraží on June 9th working service No. 12 to Technology Park. Class47

News and Features

SSR locos Nos. CEY005, CEY001 and CEY004 near their destination of Kooragang as they pass through Warabrook, ready to take the junction for the coal terminal. Anton Kendall

Alstom and Huawei complete the first LTE 4G pilot for metros

Alstom together with Huawei has successfully completed a pilot project to develop a Long Term Evolution (LTE) 4G multi-service broadband radio networking technology for metros. The project was launched in the frame of a Memorandum of Understanding signed in April 2014 between telecommunications equipment producer Huawei, which supplied the LTE network, and Alstom which provided the train set and onboard signalling equipment. Alstom is the first rail manufacturer to integrate LTE 4G in its signalling solution.

LTE technology enables a single wireless communication system supporting mission critical voice trunking and video communications, communication-based train control (CBTC) and broadband data applications such as passenger information systems and live streaming of CCTV images. It improves operational services, reinforces security control and enables remote diagnostic of the onboard equipment while reducing operational costs. Alstom has integrated the LTE technology and carried out static and dynamic tests on the metro at its Valenciennes site in France.

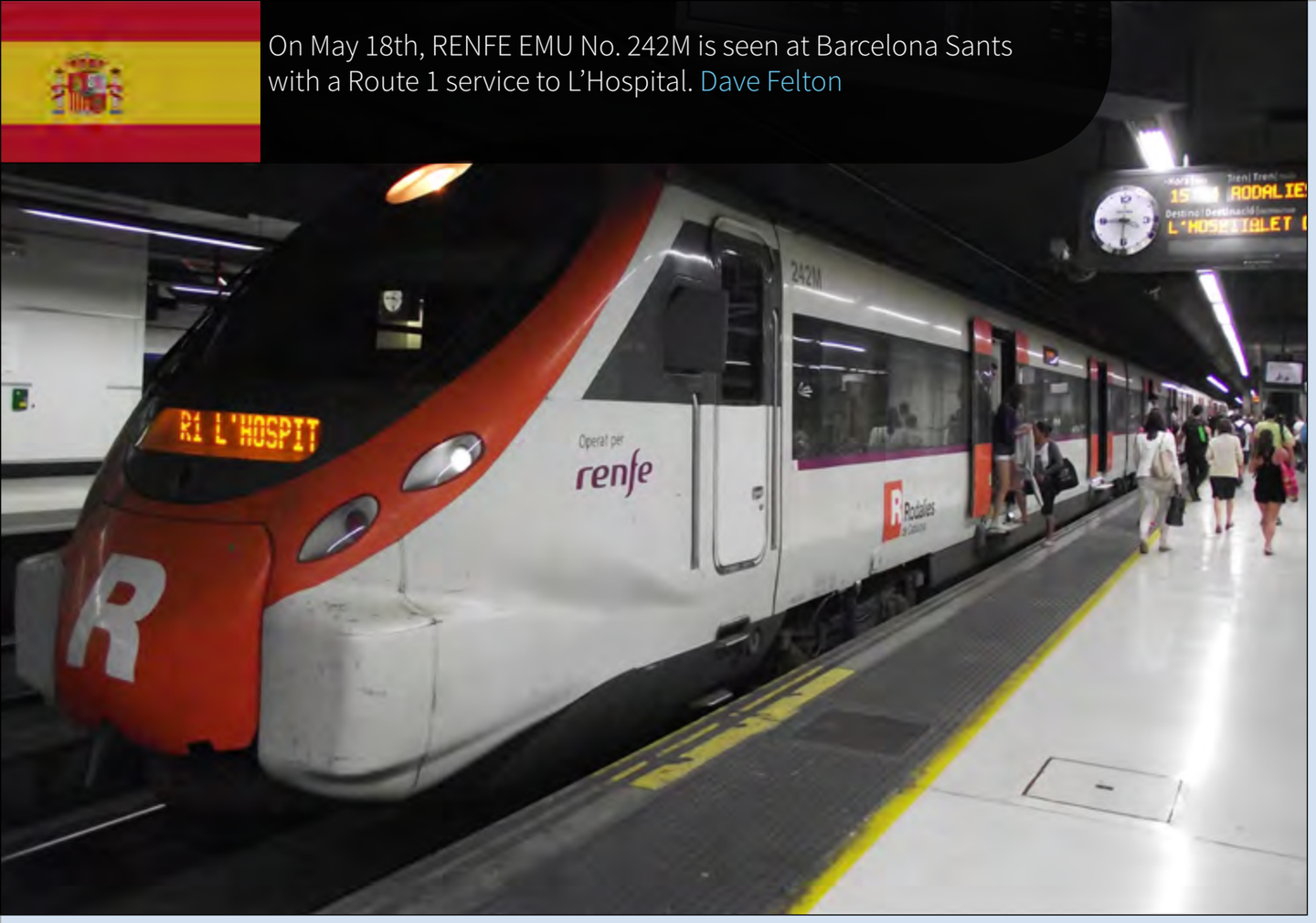
LTE 4G technology enhances Alstom's world-leading CBTC solution Urbalis that equipped cities all over the world, representing 25% of CBTC solutions deployed worldwide.

Alstom's first metro in India enters commercial service

On June 29, Alstom's first metro in India entered commercial service in the city of Chennai on the first phase of line 2 from Koyambedu to Alandur, which covers 10 kilometres and includes 8 stations. Present at the inauguration were Hon'ble Chief Minister of Tamil Nadu, Pankaj Kumar Bansal, Managing Director, Chennai Metro Rail Limited (CMRL), Bharat Salhotra, Managing Director, Alstom Transport India, as well as key government officials and other prominent dignitaries. More than 80,000 passengers are expected to travel per day on the new metro line.

In 2011, Alstom was awarded a contract worth €243 million for the supply of 42 metro trainsets (168 metro cars) for the Chennai Metro in India. As part of its global strategy to reinforce customer proximity and better adress the rising demand for mobility in several cities in India , Alstom has set up in 2012 a manufacturing plant in Sri-City. Close to 80% of the Metropolis trainsets ordered by CMRL were manufactured there while the first nine train sets (36 metro cars) were produced at Alstom's factory in Lapa, Brazil. Alstom has already delivered 25 out of 42 trains for this project. Alstom has also carried out the design of trackworks for the Chennai metro project . The 4-car Metropolis train can carry over 1,200 passengers comfortably as it is equipped with air-conditioning, a passenger information system with LED displays - including dynamic route maps in Tamil and English - CCTVs , luggage racks and special sections for ladies and people with reduced mobility. The metro offers easy and fluid access thanks to its automatic sliding wide doors and wide gangways. The stainless steel trainset is equipped with a regenerative braking system ensuring significant energy savings. The metro will operate on 25 KV AC through an overhead catenary system at speeds of up to 80 km/h.

With more than 4,500 Metropolis sold to over 20 cities, Alstom is the second largest metro supplier in the world. Designed to address the specific needs of each city, Metropolis offers a large range of options and configurations, a high level of passenger comfort and innovative features to optimise the energy consumption and the life cycle costs.



On May 18th, RENFE EMU No. 242M is seen at Barcelona Sants with a Route 1 service to L'Hospital. Dave Felton

Alstom, part of a consortium to maintain the electrical traction systems of Spain's high speed network

Adif, the Spanish railway infrastructure manager, has awarded a contract to a consortium including Alstom to maintain the electrical traction systems of Spain's high speed lines (over 2,300 km). The contract, worth €187.7 million, covers the maintenance of all the electrical traction systems (catenary lines, substations and associated systems) for the next ten years (2015-2014).

The maintenance works include the following high speed lines: Madrid-Sevilla, Córdoba-Málaga, La Sagra-Toledo, Madrid-Zaragoza-Barcelona-French frontier, Zaragoza-Tardienta & Vandellós-Tarragona, Madrid-Valencia, Albacete-Alicante, Madrid-Valladolid and Olmedo-Medina.

The consortium is formed by 7 companies (Alstom Transport, Cobra Instalaciones y Servicios, Elecnor, Electren, Inabensa, Sociedad Española de Montajes Industriales and Siemens). Alstom's share in the contract is about 15%.

Alstom hands over a H3 hybrid locomotive to Volkswagen

Alstom handed over a H3 hybrid locomotive to Volkswagen (VW) during a ceremony at Alstom's Stendal site in Scaxony-Anhalt, Germany, where the locomotives were built. This new generation of hybrid shunting locomotive will be used at Volkswagen's Wolfsburg plant for zero-emission freight transport, making a sustainable contribution towards reducing CO2 emissions. Alstom is in charge of maintaining the locomotives for a period of 10 years.

In comparison with conventional shunters, the new H3 shunting locomotive with its hybrid drive produces up to 50% less CO2 , while pollutant emissions overall are cut by up to 70%. Noise emissions have also been significantly reduced. The 350 kW diesel generator meets the requirements of exhaust gas standard stage IIIB and has been designed with future exhaust gas standards in mind. Depending on its use, the shunting locomotive will spend between 50% and 75% of its service time in battery mode. This makes it possible to achieve zero-emission rail transport in urban areas or production halls. The locomotive reaches maximum speeds of 100 km/h and can therefore easily be integrated in main line traffic.

"With this environmentally friendly hybrid concept, Alstom's Stendal site has proven its innovative prowess once again. Zero-emission freight transport will play an increasingly important role in sustainable CO2 reduction worldwide. I offer my congratulations for this unique and robust vehicle and wish Alstom many successful projects on the German and international markets," said Klaus Schmotz, Lord Mayor of the town of Stendal.

The introduction of the new generation of traction vehicles replaces the cost-intensive maintenance and repair of the existing locomotive fleet. "Volkswagen is reducing CO2 emissions on the roads and, with the new hybrid locomotive, on the railways too. We anticipate savings of 45 percent of fuel and 25 tons of CO2 emissions. The new hybrid loco contributes to from Volkswagen's sustainability objective; to achieve a 25% reduction of the environmental impact in the manufacturing area by 2018. Thanks to its frequent operation in battery mode, the level of noise is also significantly reduced," commented Kristina Mennecke, head of the industrial railroads of Volkswagen AG upon receiving the new hybrid locomotive in Stendal.

Volkswagen and Alstom are already connected in a long-lasting technology-partnership on the area of hybrid shunting locomotives. In a pilot project, Volkswagen used retrofitted shunters with hybrid drive from Alstom. The operating experiences from these locos paved the way of the development of the new H3 platform.

Measuring the bridge over the Vlatva

On Friday, June 12 at the viaduct near Červené nad Vltavou, in the area of the former Czech-Moravian transversal track between Tabor and Pisek, there was a series of measurements taking place whose results will have on its evaluation aims to ascertain the true state of this unique bridge.

It was commissioned November 20, 1889, and its length is 253 meters and a height of 67 meters was the second highest bridge in the Austro-Hungarian Empire. This height was later reduced by flooding of the valley during the construction of Eagle Lake. Nowadays, the bridge is reduced to single track, which creates a bottleneck for the entire west-east rail connections in the region.

Measurement, which was performed by locomotive Class 751.219, could help return the track to its former glory. Currently its use is for freight transport which is limited to the occasional transit of empty sets, usually wagons for loading gravel for construction work and various private carriers.

The importance of modernisation has a very compelling business case, especially when ČD Cargo provided a loco and driver for this unusual run which was not directly related to the transportation of goods.

Photo: Class 751.219 heads over the bridge. ©CD Cargo

A pair of withdrawn Class 751's are seen at Česká Třebová on June 8th. Class47

21 TRAM CONTRACT AWARDED TO CAF BY THE CITY OF LUXEMBOURG

The LUXTRAM Board of Directors has awarded CAF with the supply of 21 Trams for the City of Luxembourg worth approximately €83 million.

The competitive bidding process was launched in late 2014 and includes the removal of the overhead line from the Red Bridge to Luxembourg's Central Station. After analysis of all bids submitted, CAF obtained the highest technical score coupled with the most economically advantageous tender (MEAT).

The contract includes the supply of 21 high capacity trains for up to 450 passengers with the possibility of several extension phases.

The first track sections will be laid on the first quarter of 2016, and the first train is scheduled to be delivered in early 2017, with the objective to guarantee the start of revenue service on the line stretch from Luxexpo to the Red Bridge in the second half of 2017.

A look at the very busy Hamburg Hbf, a station which never seems to be silent, and has a plethora of shops scattered around. Well worthy of a visit. Class47

Alstom will supply 12 regional trains to Regentalbahn in Germany

Alstom has been awarded an order by Länderbahn (Regentalbahn AG), a subsidy of Netinera Deutschland GmbH, to supply twelve Coradia Lint 41 regional trains. The trains will come into service by mid-2016 in Germany, in particular on the oberpfalzbahn network, and in Czech Republic.

The Coradia Lint 41 is a sophisticated and environmentally friendly low-consumption Diesel Multiple Unit (DMU) that can reach a maximum operating speed of up to 140 km/h. The 2-unit trains ordered by Länderbahn have a total of 125 seats and up to 135 places for standing passengers. They offer full accessibility to all passengers, including people with restricted mobility, thanks to barrier-free entrances. The trains feature spacious multipurpose areas with sufficient storage space for wheelchairs, bicycles and strollers. They are also equipped with air conditioning, passenger information system and video surveillance guaranteeing a high level of passenger comfort and safety. The trains are built in Alstom's Salzgitter plant in Germany.

"Alstom thanks Länderbahn and Netinera Deutschland for their renewed trust. The company is confident in the success of this project which has an ambitious schedule in view to manufacture, test and commission the trains in just over one year. With over 780 Coradia Lint sold to 18 operators in Germany, Netherlands, Denmark and Canada, Alstom benefits from an extensive return on experience with a train which proves its value in use every day", says Didier Pfleger, Vice President of Alstom Transport for Germany and Austria. "With the Coradia Lint 41 from Alstom, we have a train already homologated and widely used in Germany," says Gerhard Knöbel, CEO of Regentalbahn AG.

Alstom metro trainsets enter commercial operation in Baku

Alstom's new metro trainsets for the Baku metropolitan system have entered into commercial operation. The 3 metros, consisting of 5 cars each, have successfully undergone all tests and will now be used on the existing "Red and Green" metro lines. For the first time in Azerbaijan, the metro trainsets have inter-car walkways to optimise passenger traffic flow and vertical handrails near the doors to enhance passenger safety when the train is in motion. The metros' capacity has been increased to 1,047 passengers and 202 ergonomic seats and the head car has been fitted with a dedicated area for persons with reduced mobility. The metros are equipped with LED lights to ensure greater luminosity and better energy savings. All materials used in the train's interior meet global requirements in terms of anti-vandalism design. The new 1520 mm gauge metro cars have been produced at the Metrovagonmash plant.

"These new metro cars will ensure safer and more comfortable trips in Baku. They have undergone the strictest quality control and comply with the highest standards. We intend to expand our co-operation with the Baku metro system and we will continue delivering advanced metro cars, jointly manufactured in Azerbaijan, into the future," said Martin Vaujour, Senior Vice President of Alstom Transport for the CIS region. Baku's underground system was commissioned in 1967. 2010 saw approval of the 20-year phase-gate development program related to Baku's metro, providing for the construction of 53 new stations and 84.3 km of new metro lines by 2030. A total of 1,100 metro cars are to be replaced by 2028. The trains for the first new lines being built are to be purchased.

Alstom is expanding its presence on the CIS market through local partners, implementing the localisation of manufacturing. In 2010, Alstom Transport acquired a blocking minority stake in Transmashholding (TMH), Russia's leading railway manufacturer. To date, Alstom and TMH have created 4 joint ventures in Russia and Kazakhstan to carry out projects for the 1520 mm gauge market.

Alstom's Régiolis in Lower Normandy to be maintained in a new workshop in Granville

Alstom's Régiolis for the Paris-Granville line will be maintained in a new workshop, inaugurated on 10 June by the region of Lower Normandy and SNCF Basse-Normandie. The region of Lower Normandy has bought 15 hybrid (electric and diesel) and dual-voltage (1.5 and 25 Kv) Régiolis train sets. 9 train sets have already been delivered and a team of 15 service technicians now ensure maintenance operations in SNCF's workshops in Granville.

The "intercity" version of Régiolis bought by the Lower Normandy region has a number of specific facilities: passenger counting system, first-class luggage space, modular spaces for bicycles, individual bins, newspaper racks, comfortable seating.

The Régiolis train sets can also accommodate standing passengers in rush-hour in conditions of maximised comfort and security. All the train sets have a fully low floor, facilitating access for all passengers, including passengers with reduced mobility. The elements of the train are interconnected, making it possible to move along the whole length of the train. The Régiolis train sets of Lower Normandy are also equipped with new functionality, such as display screens and a dynamic sound system. They also have electrical sockets and a variety of spaces for luggage storage.

To date, a total of 74 train sets have been delivered to 10 French regions: Alsace, Aquitaine, Lower Normandy, Franche-Comté, Lorraine, Midi-Pyrénées, Pays-de-la-Loire, Picardy, Poitou-Charentes and Provence-Alpes-Côte d'Azur. Alstom's service teams are currently deployed in these regions and guarantee the availability of material by ensuring corrective maintenance and reinforcing the reliability of the material. In total, the Régiolis trains have already covered over 2.5 million km in commercial service.

The production of Régiolis trains creates over 4000 jobs in France for Alstom and its suppliers. 6 of the 12 Alstom sites in France participate in this project: Reichshoffen for the design and assembly, Ornans for the motors, Le Creusot for the bogies, Tarbes for the traction chains, Villeurbanne for the on board electronics and Saint-Ouen for the design.

Alstom to supply automatic pilot for Line A of the RER of the Paris network

Alstom will develop and install, for RATP, STIF and the Ile-de-France region, an automatic pilot control system for Line A of the Paris RER. The contract, worth approximately 20 million euros, includes detailed studies, the development of the prototype and equipment for the train sets, testing and project assistance until the commissioning of the rehabilitated line, scheduled for 2018. The project aims to reinforce the performance and frequency of the RER A, which transports 1.2 million passengers per day, making it the most heavily frequented regional line in Europe.

"This new contract demonstrates RATP's renewed confidence in us and illustrates Alstom's ambition to reinforce its position in the signalling market," says Ana Giros, Managing Director, Alstom Transport France.

The automatic pilot will be put into service on the fleet of 173 trains (MI2N and MI09) currently circulating on Line A of the RER. The system, integrated into the SACEM system, will improve the regularity of the line, while offering time savings of approximately 2 minutes on the average journey between the stations of Vincennes and La Défense. Alstom Transport's sites at Saint-Ouen and Villeurbanne are involved in the project.

Since 1989, the SACEM system (system for aiding control, usage and maintenance) has ensured the performance and security of Line A of the RER by continually controlling the speed and the interspacing of the trains. Alstom has actively participated in the development and the implementation of this solution.

ARRIVA STRENGTHENS IN THE NETHERLANDS FOLLOWING £1.4 BILLION BUS AND RAIL CONTRACT AWARD

Leading European passenger transport group Arriva has been awarded a £1.4 billion bus and rail contract in the Netherlands. Arriva will begin the 15-year contract in the Dutch province of Limburg from 11 December 2016 and will operate a fleet of 226 new buses which will serve passengers in towns and cities including Maastricht, Heerlen and Roermond. A fleet of 36 new trains will also be operated by Arriva in the Limburg province with services including cross-border trains to Germany and Belgium.

The contract award cements the firm's position as one of the leading public transport operators in the Netherlands where they already operate 1,200 buses, 101 trains and have 5,000 employees. Arriva has a total of 55,000 employees across Europe.
The Limburg concession award comes only six months after Arriva Netherlands began to operate an eight-year and a 10-year bus contract in the Brabant region which borders Limburg. David Martin, Chief Executive of Arriva said: "We are already a major transport operator in the Netherlands so we are naturally delighted to be expanding our operations further in the south of the country.

"We submitted a pioneering bid for the Limburg concession which was based around innovation, new ticketing systems for customers and new connections across the region and into Germany and Belgium. We look forward to starting in December next year and attracting more people to bus and rail services in the Netherlands."

As part of the contract Arriva will be running a direct train service between Liege and Aachen via a hub in Eijsden and will launch a simplified ticketing system for both bus and rail.
Services will also be integrated with existing IC bus routes and Arriva will start new cross-border bus services to Hamont in Belgium. The company also confirmed that it will open a new regional head office in Heerlen.

The new beast of the railways - InterPanter long distance trains

The latest InterPanter electrical unit from Škoda Vagonka was officially given its name on the test circuit in Velim on June 26th. Last year, Czech Railways ordered a total of 14 of these modern trains designed for inter-regional and long-distance transport - ten five-car and four three-car electric units.

"Present-day customers expect fast and comfortable travel from railway companies. Trains must be wheelchair accessible, air-conditioned; passengers want to be able to recharge their laptop or other electronics during the journey, they want to be connected to the internet via WiFi, they expect fast and comprehensive information about the train route and schedule and naturally they also rely on a high level of railway safety. Hundreds of local and long-distance train connections of Czech Railways already offer this level of travelling, and we are now also going to offer this to passengers on another two express train lines, where the new InterPanter units will be used," says Pavel Krtek, general manager and chairman of the Board of Directors of Czech Railways. "I am delighted that we have managed to completely develop and manufacture another Czech train. Besides the CityElefant and RegioPanter units, passengers will soon be able to travel in a new modern InterPanter train. This is connected to the long tradition of manufacturing of electric units, which have been used both here in the Czech Republic and in Lithuania, Ukraine, Slovakia, and soon also in Germany," adds Tomáš Ignačák, general manager of Škoda Transportation.

The vehicles are based on the time-tested solution in the form of RegioPanter single-floor units designed for regional transportation. The basic dimensions and colour designs of both types of units are identical, but they differ especially with regard to the technical solution, the number of doors and the interior, which is designed for comfortable travel over long distances. The units are designed for electrified tracks with a traction voltage of 25 kV, 50 Hz and 3 kV for the maximum speed of 160 km/h. The casing has a lightweight integral construction from large aluminium profiles. Compared to classic 'iron' closets, this reduces the weight of the vehicle and at the same time prolongs its life. Rapid boarding and the exit of passengers is enabled by large double-wing doors.
Trains have a comfortable, pleasant and fully air-conditioned interior, wheel-chair accessible toilets, sockets with voltage of 230 V, and of course Wi-Fi. The units are equipped with a reservation system for seats, which are padded and adjustable. The units also include separate compartments for passengers with children up to 10 years of age, space for the storage of bicycles, prams and other bulky luggage, and a modern acoustic and audiovisual system. The units are also adapted for wheelchair accessible transport.

The new train got the name InterPanter from a competition organized by Czech Railways together with Škoda Transportation. A total of 5,097 original designs were submitted. Today, the author of the winning proposal received an In Card with the Application IN 100 from Czech Railways for one year at a value of 19,990 CZK. The national railway carrier also rewarded another nine of the most interesting proposals.

An ICE service departs Koln Hbf late at night on April 23rd.
Mark Torkington

Stadler Rail wins $100million contract in Texas

Stadler will deliver eight FLIRT3 trains to the Texan public transportation company Fort Worth Transportation Authority, known as “The T” for short. The contract also includes additional options. This is the first sale of FLIRT vehicles in the USA for Stadler Rail. On Tuesday, 9 June 2015, both companies signed the contract in Fort Worth, Texas, USA. The total value amounts to approximately 100 million US dollars. This includes all supplementary services. The delivery date from the factory is set for July 2017, with the subsequent approval period lasting until March 2018. The diesel-electric drive trains will operate on the new TEX Rail line, which will run between Fort Worth and the DFW International Airport, and they are due to start operating on this new line in September 2018.

This contract for “The T” is the fifth contract for Stadler Rail with an American company. To date, the company has sold 49 GTW multiple-unit trains in the USA. In contrast to previous contracts, national federal funds will make up a portion of the financing for the current order, making this the first time that the “Buy America Act” comes into play in a Stadler project. The act stipulates that 60 per cent of the added value is to be created in the USA. Stadler Rail has therefore decided to construct a new factory in the United States. A delegation including CEO Peter Spuhler and Martin Ritter, future CEO of Stadler US, is currently in the States examining various options for the new site. The vehicle bodies and the bogies will be produced in one of Stadler’s Swiss factories, and final assembly will take place in the new factory in the USA.

PKP Intercity provides Internet and TV access on trains

Starting on 13 April, a test service was activated on selected PKP Intercity trains, which gives passengers access to specially selected video on demand offer, including hit films, popular TV series and cartoons in the player.pl service. The service is provided as part of an agreement between PKP Intercity and T-Mobile Poland to provide access to Internet and mobile entertainment aboard their trains.

Every user of a laptop, tablet or smartphone is able to take advantage of the attractive offer of films, TV series, cartoons or games, made available in the special PKP Intercity Zone in the player.pl service. Videos will be available without advertisements and using the service will not use up mobile data. Users will need to connect to the T-Mobile Hot Spot, go to player.pl or install the mobile application, sign up for an account and watch without limits. During the test period, the service will be free. Ultimately, the planned cost of 24 hours of access is 4.99 PLN. After the end of the trip the service will not be turned off, but its use will still be possible through the user’s own internet connection.

Player.pl in the PKP Intercity Zone will provide a wide range of video subjects, thanks to which every traveller will find something to their liking. TV series fans will find Odwróceni, Lekarze, Prawo Agaty, Da Vinci’s Demons or the second season of Gran Hotel, as well as up-to-date episodes of the newest TVN productions: Nie rób scen and Mąż czy nie mąż. Besides TV series, they will offer popular film titles. Among them are The Illusionist with Jessica Biel and Edward Norton, The Ides of March with Ryan Gosling, The Cloud Atlas with Tom Hanks, Taxi 3 and 4, Coco Before Chanel with Audrey Tautou, or Woody Allen’s romantic comedy Midnight in Paris. Children will find a special cartoon offer, with titles like Shaun the Sheep, Peppa Pig, The Adventures of Chuck & Friends or My Little Pony.

The player.pl platform debuted on the market towards the end of August 2011. The service offered TV series and programmes known mainly from TVN channels. Currently, the library contains over 15,000 titles, including those produced exclusively for the service. Mobile versions of Player.pl are available for Android, iOS and Windows Phone, on Sony Playstation consoles, television sets from leading producers as well as the new generation television nc+ and T-Mobile, Netia and Toya subscribers.

Siemens Velaro train wins “Red Dot” award

The Velaro family of trains has won the coveted “Red Dot” design award for quality in recognition of the platform concept for high-speed trains that can be used to configure very different types of trains. Velaro combines aesthetic design with a high level of functionality.

The jury has recognized the consistent styling throughout the interior and exterior of the new Velaro platform. In terms of detail, this means clearly defined structures and components, joints designed with minimum gaps, no visible screw fittings wherever technically feasible, and particularly ergonomic functionality for components with increased accessibility and user-friendliness requirements. Special emphasis was also placed on material aspects and manufacturing quality in the interior of the train, to reinforce the quality of the product and thus fulfill passengers’ comfort expectations.

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The Velaro is the first high-speed train to comply with the European “TSI PRM” interoperability specification. This defines parameters and requirements for constructing and refitting rail vehicles and rail infrastructure without barriers. Wheelchair users can access their seats easily, safely, and in comfort thanks to wider entrances, exits, and corridors. Access to restaurant cars is easier thanks to the use of wider intercar gangways. Special lifts enable wheelchair users to board the train without outside help, directly from the platform opposite the train.
The train also complies fully with the TSI PRM requirements for visually impaired passengers, e.g. by providing a strong contrast on handrails and controls and introducing clear directional systems.
The Design Zentrum Nordrhein Westfalen has been celebrating outstanding international product design since 1955 by awarding its famous Red Dot. The manufacturers and designers of a range of industrial products can now apply for the Red Dot in 31 categories. In 2015 companies and designers from 56 countries put forward a total of 4,928 products.

PKP Cargo Class ET41-041 heads a lengthy coal train through Zilina on June 5th.
Class47

Siemens to electrify Denmark’s rail network

As part of a consortium with construction company Per Aarsleff AS, Siemens has been commissioned by Danish rail company Banedanmark to electrify nine rail routes with a total length of some 1300 kilometres.

“We will be equipping about 1300 kilometres of Denmark’s rail network with electrical overhead lines. This is something we are proud of, that shows how competitive our technology is,” said Elmar Zeiler, head of the Rail Electrification unit at Siemens. “Our overhead contact line systems increase the availability and cost-effectiveness of rail routes, while at the same time offering operators a green alternative to diesel traction.” Electrified rail networks allow speeds of between 160 and 250 km/h, as well as reduced operating and maintenance costs.

Electric traction is acknowledged the world over as the most powerful, fastest and most environmentally sound means of transporting passengers and freight. Denmark too is currently seeing a huge upsurge in rail electrification. Siemens is to fit overhead lines (2x25 kV) to nine tracks on Denmark’s rail network by the end of 2026. The electricity supply will also be installed with substations, auto transformer stations and remote control equipment. This ambitious project will kick off with the electrification of the 57 kilometre stretch between Esbjerg and Lunderskov in the south of the country.

Bombardier to Supply 40 Additional FLEXITY 2 Trams to Belgian Transport Agency De Lijn

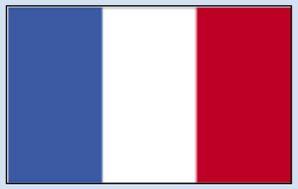
Bombardier Transportation has won an order to supply 40 additional BOMBARDIER FLEXITY 2 trams to the Flemish transport operator De Lijn for the Belgian cities of Ghent and Antwerp. This order is an option included in an initial contract signed in September 2012 and is valued at approximately 97 million euro ($107 million US).

The order increases De Lijn's fleet of FLEXITY 2 trams from 48 to 88. De Lijn announced their decision to order the additional trams at a public ceremony celebrating the official inauguration of new FLEXITY 2 trams in the city of Ghent on May 11. Not only will the new trams replace an aging fleet, but at nearly 43 meters long they can carry up to 40% more passengers than their predecessors. Passengers will also benefit from easy access and comfort as the low-floor vehicles are equipped with multipurpose areas for those travelling with reduced mobility and storage space for bicycles and prams.

Roger Kesteloot, General Director, De Lijn, said, "We are happy to be able to provide these two Flemish cities with a much-needed capacity increase with this order. The initial reaction to "Albatros"– the name that our passengers chose for the FLEXITY 2 trams – in Ghent has been very positive. We are looking forward with anticipation to the deliveries of the 40 additional trams."

De Lijn and Bombardier have a long-standing partnership, not only for the supply of newly built trams, but also for structural revisions, refurbishment and crash repairs on De Lijn's existing fleet. Bombardier is also a partner in the EVTecLab field trial project where De Lijn will operate three electric buses equipped with BOMBARDIER PRIMOVE technology for inductive charging in the city of Bruges. Ghent will receive 16 bi-directional, seven-module vehicles with a length of approximately 43 meters and able to accommodate up to 378 passengers. Antwerp will receive 24 mono-directional trams. Fourteen of these will be seven-module vehicles with a length of approximately 43 meter and a capacity for 380 passengers. This is in addition to another ten, five-module vehicles with a length of approximately 31 meters and a capacity of up to 266 passengers.

All trams are 2.3 meters wide and equipped with BOMBARDIER FLEXX Urban 3000 meter gauge bogies with conventional axles that deliver a smooth ride as well as reduce wear and tear on both wheels and tracks. The motorized bogies also feature full suspension motors and gearboxes to keep ground vibrations to a minimum. In addition, all vehicles are equipped with the BOMBARDIER MITRAC propulsion system and have heating, ventilation and air conditioning (HVAC) systems for drivers and passengers. The passenger HVAC system features improvements such as variable CO2 controlled fresh air flow to ensure an optimized climate for the passengers. Worldwide, Bombardier now has more than 4,000 trams and light rail vehicles in successful revenue service, or on order.



Voith to Overhaul Eurotunnel Trains During Regular Service

Since its inauguration in 1994, more than 330 million people have crossed the Eurotunnel – in a train bearing the symbolic name "Le Shuttle" for obvious reasons. It covers the route from Coquelles near Calais to Folkstone in just 35 minutes and, with a length of 800 meters, is one of the longest trains in Europe. Each of the altogether nine trains of the Eurotunnel fleet consists of 24 carriages connected by automatic Scharfenberg couplers from Voith. The operator Groupe Eurotunnel S.A. is currently in the process of having all couplers overhauled and/or refurbished by Voith – during regular service. The mammoth project, which started in early 2015, is to be completed by the end of 2017. The major challenge of the scheme lies both in its tight deadlines and the inherent technical modifications. Each of the trains has to be overhauled within two and a half weeks. Voith always understands its service and overhaul contract as a consulting assignment in terms of technological innovations.

"Voith knew how to use its resources to meet all commitments and Eurotunnel could meet the challenges of the major maintenance campaign with the help of Voith. The cooperation among our teams was full of lessons for both parties and was the key to the success of this first overhaul", says Nicolas Beaugrand, Concession Procurement Director.
Semi-permanent couplers situated between the carriages will replace the existing T110 couplers in all sections of the trains that do not need to be automatically decoupled. However, in an emergency, manual decoupling is still possible. For such an event, a specific new solution has been devised, which allows separating the E-couplers while they are still connected. In addition, the old coupler drawbars including dampers will be replaced by new parts across the entire train. Coupler drawbars ensure energy absorption throughout the train and allow quieter running. Over a period of more than three weeks, Voith Turbo Scharfenberg has prepared Eurotunnel and the local operator for the overhaul – with training sessions on site as well as in Salzgitter, the location of Voith Turbo Scharfenberg. Moreover, Voith will supply most of the spare parts and carry out the refurbishment of technically demanding components such as bearing brackets, muff couplings or bolts.

SCHWARZHEIDE: METRANS EXPANDS NETWORK FURTHER

Metrans, the intermodal subsidiary of Hamburger Hafen und Logistik AG (HHLA), began serving the terminal in Schwarzheide in Brandenburg in early June. In doing so, Metrans is expanding its own network once again and enhancing its services in eastern Saxony and south-eastern Brandenburg. The terminal in Schwarzheide, which is operated by Bertschi Global Logistics, is situated on the rail link between Germany's seaports and Ceska Trebova, Metrans' second Czech hub terminal, after Prague. Metrans is the first company to offer regular rail services linking the terminal with the Port of Hamburg and the inland Czech hub at Ceska Trebova. The BASF factory in Schwarzheide, on whose premises the terminal is located, will also benefit from this. Metrans will use its own locomotives and wagons for the rail services and is therefore independent of external service providers. The terminal has six railway tracks and a container storage area for 1,700 containers. The portal crane has a span of 90 metres. The Metrans trains to and from Schwarzheide can carry all of the containers and tank containers permitted in intermodal transport, ranging from 20 to 45 feet.

Klaus-Dieter Peters, Chairman of HHLA's Executive Board, explains: "The terminal in Schwarzheide is an additional element that will enable us to make our intermodal network even denser. We will benefit from this in several ways: We can bring cargo to our container terminals and also make even better use of capacities at our hub terminal in Ceska Trebova. Our goal remains to operate the most efficient and effective intermodal network for container transport in Central, Southern and Eastern Europe."

Jiri Samek, Managing Director of the Metrans Group, highlights the importance of the facility: "Schwarzheide is an important addition to the Leipzig and Usti nad Labem locations, which we already serve. It means that we are specifically expanding our services for eastern Saxony and south-eastern Brandenburg. By incorporating the location into the Metrans network, we will be able to offer our customers regular transportation services for internal European cargo between Schwarzheide and Central, Eastern and Southern Europe. It will also enable us to better reposition empty containers from the Czech and Slovakian depots. We will be using our own rolling stock for the Schwarzheide rail services as well. This will mean greater reliability, which our customers will benefit from. We are therefore continuing to market ourselves as a premium service provider."

Metrans only commenced operations at its own terminal in Usti nad Labem on the German-Czech border at the start of the year.

Siemens finalizes service agreement with Russian Railways

Russian Railways (RZD) has awarded Siemens a maintenance contract for Desiro RUS type regional trains. Negotiations started already in 2011 when Siemens was awarded to produce the trains. The maintenance contract will run for 40 years.

The production of the 240 trains (1,200 cars) started in 2013 with increasing localization in Yekaterinburg. The first 10 trains have already been produced and certificated. The delivery will continue till 2020. The trains will be in passenger service above all in Russia's rapidly growing metropolitan regions. In 2011, RZD has awarded Siemens a 40-year maintenance contract covering 54 trains. The current contract integrates this former agreement, bringing the total number of trains to be serviced to 294.

The depots in Adler near Sochi and in Moscow are being made available by RZD, while Siemens is responsible, among other things, for the management of the service work, for the logistics and for the supply of spare parts. The 40-year contract includes preventive maintenance of the Desiro RUS and all inspections which have to be conducted at different intervals. In peak-load periods, as many as 100 people will be working on the trains in both depots.

Transdev wins Mittelsachsen operation contract in Germany

Transdev has won the contract to operate the Mittelsachsen (Saxony) rail network. It is the largest contract Transdev has won in five years, proof of the Group's railroad expertise. Deutsche Bahn (DB), the historic German operator was the previous contract holder.

The network, with a total of around 5.8 million train kilometres per year will be operated by Transdev under the Mitteldeutsche Regiobahn brand for 14.5 years from June 2016. The transportation authority will provide 29 new Alstom electric multiple units (EMU) for use on the network.

This latest success comes hard on the heels of a 10-year contract signed last March for the regional train service between Leipzig and Chemnitz involving 1.1 million train kilometres per year. With its Mitteldeutsche Regiobahn brand, Transdev is one of the leading railroad operators in Saxony.

Mumbai metro line 1: one year of success and already 100 million journeys

The Mumbai metro line 1 entered service on 8 June 2014 and celebrated its first anniversary by crossing the symbolic threshold of the 100 millionth passenger. This is a fine achievement for RATP Dev and Transdev which run the line jointly.

RATP Dev and Transdev teamed up in their joint venture in Asia to win a five-year contract to operate and maintain the infrastructure for the Mumbai line.

Mumbai's line 1, at 12 km in length with 12 stations all overhead and built on a viaduct, is the first in the city, the fifth most populated conglomeration in the world with a population of 22 million. The line is part of a global project that includes at least three other lines totalling 90 km.

The line connects the city's eastern and western suburbs and has radically changed the daily life of people who previously depended on a bus network that suffered from traffic congestion. Some passengers have saved up to two hours a day.

Average line patronage is now up to 260,000 passengers per day, which should continue to rise in parallel with the increase in the city population, estimated at 4% per year.

The line is a fine achievement and a clear reference for RATP Dev and Transdev in India, where public transport will expand. The country is likely to become one of the world's leading markets for metro services; 500 km of lines are scheduled in the next five years.

Voith Refurbishment of 22000 Class Vehicle Front Ends

Voith has provided new aluminum fairing for the front ends of 62 trains of the 22000 class for Irish Rail. This is not just a facelift for these diesel railcars - that can comprise up to six units - but rather a redesign with many operational advantages and a substantial enhancement in the visual appearance of the cars.

The Hyundai Rotem cars have been in use on the Emerald Isle as inter-city trains since 2007. With top speeds of up to 160 km/h, the lower vehicle range, which can be made up of three, four, five or six units, is constantly subjected to damage by bottles, stones or other foreign bodies that are swirled up. Up until now, a glass fibre reinforced plastic (GFRP) element from the manufacturer protected the lower vehicle range, however this did not provide sufficient robustness or ease of repair. Irish Rail therefore searched for potential improvements.

Voith developed this easy to repair and robust multi-part aluminum fairing for Irish Rail. This aluminum fairing is 2.5 mm thick. It is pressed like an automobile fender and is attached to the car using a steel auxiliary frame in compliance with the car tolerances. The design was prepared in 3-D CAD taking into account the weight specifications and then optimized using the finite element method. Both Irish Rail and an independent Irish institute made a positive assessment of all results.

The Voith fairing is easy to repair due to its multi-part design and the aluminum material. In future, slight damage can be removed, welding is also an option or parts of the fairing can be easily replaced. Additional advantages are a lock for the service door that uses a standard key and a replaceable dirt grid for the signal horns.

Differing car tolerances presented a particular challenge for Voith. This was met by the designers with the use of shims, slots and rubber elements. A detailed measurement of the car also preceded the design for this reason.

The Voith aluminum design, assessed as aesthetically pleasing by the customer, underwent extensive testing in two prototype series on various trains in the depot in Ireland. It was also possible to train the first Irish Rail service technicians during these tests. The first 70 sets of aluminum fairing will be delivered by Voith to Ireland this year. The entire contract runs until Spring of 2016.

Bombardier Wins Contract to Provide 162 MOVIA Vehicles to India's Delhi Metro

Rail technology leader Bombardier Transportation has won a contract to supply 162 BOMBARDIER MOVIA metro cars to Delhi Metro Rail Corporation Ltd (DMRC). The new trains will increase the number of DMRC's existing fleet of MOVIA metros from 614 to 776 and make it one of the largest metro fleets in the world. The order is valued at approximately 15 billion INR (204 million euro, 228 million US), and delivery will begin in the third quarter of 2016 and is expected to end in early 2018.

Harsh Dhingra, Chief Country Representative, India, Bombardier Transportation said, "We are pleased to have received this new order for another 162 MOVIA vehicles for New Delhi. It is an excellent endorsement of our growing relationship with Delhi Metro who has already awarded us around $1.2 billion USD worth of rolling stock and signalling contracts. These additional trains will be delivered from our state-of-the-art manufacturing sites in Vadodara."

The modern, high-capacity MOVIA metro vehicles integrate some of the world's most advanced mobility technologies such as the BOMBARDIER MITRAC propulsion and control system and the BOMBARDIER FLEXX Metro 3000 bogies, an extremely robust and reliable design specifically adapted to suit Delhi's existing infrastructure.

In its six-car configuration, these new vehicles will accommodate 1740 passengers and once configured into eight-car sets, will carry as many as 2,400 passengers providing a much needed capacity increase on two of Delhi's main metro lines.

The high degree of localisation executed in the project at both Savli and Maneja sites is in line with the Indian government's 'Make in India' campaign that encourages local manufacturing. Bombardier is also Delhi Metro's largest signalling solutions contractor with over 120 km of line in operation or in progress for Delhi Metro's Line 5, 6 and 7.

After more than five decades of investing in India, Bombardier Transportation employs around 1,100 people in India. It operates a railway vehicle manufacturing site and bogie assembly hall at Savli near Vadodara, Gujarat. This is in addition to a propulsion systems manufacturing facility at Maneja, a Rail Control Solutions centre near Gurgaon, Delhi NCR and an engineering centre in Hyderabad that serves key projects worldwide

Bombardier Wins Contract to Manufacture and Maintain up to 156 Trams for Vienna

Bombardier Transportation and the Vienna transport authority, Wiener Linien, have signed a contract for the manufacture of 119 FLEXITY Vienna trams, which includes a 24-year FlexCare maintenance management system agreement. The contract is valued at approximately 431 million euro ($480 million US) and includes an option for an additional 37 trams and further maintenance support. The vehicles will be manufactured at Bombardier's Vienna site.

Günter Steinbauer, CEO, Wiener Linien, said, "We wanted a vehicle that is modern, comfortable and environmentally-friendly, that fits the existing infrastructure and offers good value for money."

Carsten Bopp, Head of Light Rail Vehicles, Bombardier Transportation Austria said, "We are delighted that Wiener Linien has opted for our FLEXITY trams and the FlexCare maintenance management system. Our employees at the Vienna site are particularly proud that Bombardier trams will operate in their hometown. We would like to thank Wiener Linien for their trust and for giving us the opportunity to play a part in shaping the cityscape of Vienna."

The 34-meter long FLEXITY Vienna trams accommodate 211 passengers, feature wide passage ways, spacious multipurpose areas and low entrances, setting new standards for passenger comfort. The combination of internationally proven low-floor technologies and BOMBARDIER FLEXX Urban bogies also guarantees a smooth ride. Furthermore, due to the use of well-proven BOMBARDIER MITRAC propulsion equipment, the FLEXITY trams also distinguish themselves with an availability rating of over 95 percent. The trams will be supported by FlexCare, Bombardier's innovative maintenance management system.

Easily integrated into existing maintenance processes, FlexCare enables customers to perform maintenance at their own depots under the overall maintenance management responsibility of Bombardier. This system guarantees high availability and reliability for the vehicles and offers customers planning reliability and cost certainty over the contract period.

More than 1,300 FLEXITY 100% low-floor trams have been sold to date. Overall, Bombardier now has more than 4,000 trams and light rail vehicles in successful revenue service or on order in cities across Europe, Asia, Australia and North America.

From the UK - Llangollen Railway

The Llangollen Railway is a preserved steam railway in Denbighshire, Wales, which operates between Llangollen and Corwen. On the weekend of June 19th - 21st, the line held its annual railcar gala.

Visiting the line for the gala from the Ecclesbourne Valley Railway, Class 122 DMU No. 55006 stands at Berwyn station. Brian Battersby

BR Class 109 DMU Nos. 50416 and 56171 stand at Llangollen station having arrived with a service from Corwen on June 20th. Richard Hargreaves

BR Class 104 DMU Nos. 50454 and 50528 arrive into Glyndyfrdwy with a service from Corwen on June 20th. Class47

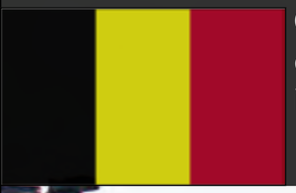
BR Class 108 DMU Nos. 51907 and 54490 are seen departing Berwyn with a Carrog bound service. Richard Hargreaves

BR Class 127/108 hybrid DMU Nos. 56223 and 51618 is seen stabled at Llangollen on June 20th. Class47

British Rail Class 08/10 Hybrid ‘Davey’ is seen stabled in Llangollen yard on June 20th. Class47

GWR 6400 Class 0-6-0PT No. 6430 is seen with the 'Autotrain'. For those not familiar with the 'Autotrain' it uses a type of coach that was used by the Great Western Railway for push-pull trains powered by a steam locomotive. The distinguishing design feature of an 'Autocoach' is the driving cab at one end, allowing the driver to control the train without needing to be located in the cab of the steam locomotive. This eliminates the need to run the engine round to the other end of the coach at the end of each journey. Class47

From the Archives



Cockerill built Class 51s Nos. 5128 and 5112 are seen stabled at Hasselt on June 28th 2001. These diesel locos, built between 1961 and 1963 were used on services between Lille and Bruxelles. No. 5128 in this photo has been preserved by the Patrimoine Ferroviaire et Tourisme. Paul Godding

On February 18th 2009, OBB Class 1044.048 approaches Attnang-Puchheim with a REX service from Linz to Salzburg.
Class47

On September 17th 2008, Ceske Drahy's Class 751.128-9 is seen departing Kralupy nad Vltavou, heading for Kladno. Class47