# Railtalk Magazine Xtra

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### Welcome

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

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

This month I should like to say a special thanks to Colin Gildersleve for some excellent shots from Australia, not a country that we have featured before, and also a special mention to Martin Grill for some excellent Czech shots both here in the magazine and on our forum.

I hope that you all enjoy them.

Once again many thanks to the many people who have contributed this month, it really makes our task of putting this magazine together a joy when we see so many great photos. This issue wouldn't be possible without: Colin Gildersleve, Steve Madden, Brian Battersby, Richard Hargreaves, David Hollowood, Pavel Kopec, Tomáš Kubovec, Ron Halestrap, Martin Grill, Pavel Šturm, Filip Štajner, Martin Hart, Andrew Flusk, Colin Irwin, and Carl Grocott.

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# **Pictures**

Czech Class 749.261-4 departs Olomouc on November 26th with a local passenger service for Unicov. Class 47



A Transperth "B" class 25Kv EMU set is shunted for the last time at Midland prior to entering the Transperth suburban network. The EMU was built in Maryborough, Queensland by EDi Rail/Bombardier Transportation. It is then attached to one of the East-West intermodal freights to Perth. The Transperth suburban network is narrow gauge (3' 6") and the East-West railway is standard gauge so these units travel on standard gauge transporter bogies until they arrive at Midland in Western Australia. They are then put onto their narrow gauge motor bogies that have travelled with the units in open wagons, they also have their pantographs installed at this stage. Finally they are sent to Transperth's northern most depot at Nowergup, where they are then commissioned. This shot shows the Transperth shunter about to enter the Transperth system and head for the Nowergup Depot with set No. 88, which is the second set of an additional eight to be delivered for Transperth's expansion of the suburban rail network. Colin Gildersleve





AC4303 takes a freight through Midland, in the eastern suburbs of Perth, on its journey from Kalgoorlie to Forrestfield Yard on January 22nd. There are eight of these AC class locos in service with Australian Railroad Group (ARG) and this particular loco was delivered to Western Australia in September 2009, from the builders UGL (Rail) in Newcastle, New South Wales. They have a Co-Co bogie arrangement and are 4,500hp with General Electric traction equipment, there is an option with the builder for a further 16 locomotives if ARG require them. Colin Gildersleve





Above: A pair of Jordanian GE U20C locomotives are seen on banking duties at Aqaba, Jordan on January 11th. *David Hollowood* 

Top Right: Another pair of Jordanian GE U20C locos, this time seen climbing the formidable incline out of the cement works at Aqaba, Jordan on January 11th. *David Hollowood* 

Bottom Right: Czech Railways Pendolino Class 680 633 is seen passing Lupěné - Hoštejn on December 20th. *Pavel Kopec* 







CD 749.246-5, passes Ramzová, working Sp 1800 - fast train From Nysa (Poland) to Jeseník. This train always contains Polish first class coaches only, but it is only a matter of comfort and you don't need to buy tickets for first class, because it is declassified as second class all the way through. Many of











imposing sight when viewed from the lineside. Colin Gildersleve





#### Austria's high-tech base for OBB opens in Matzleinsdorf

Location and consolidation will save OBB about 10 million euros in the first years, and 234 million in 50 years. At the new base in Matzleinsdorf, ÖBB brings together technology, service and staff for three different companies, ÖBB: Austrian Railways passenger AG, ÖBB Technische Services GmbH and ÖBB-Production Ltd. The depot will provide a whole new infrastructure not only for the maintenance of entire trains but in terms of efficient management and planning, cleaning and care of the trimmings.

At the same time located here is the scheduling of some 400 drivers. In the future, some 1000 employees will work here.

Located at the former freight station Wien Matzleinsdorf where once trucks were loaded, and bringing together several outdated and scattered locations of Austrian Railways into a modern hi-tech location, it has taken around 350 people to build in a record time of 23 months. On this modern site,

maintenance of locomotives and passenger coaches, carriage-interior cleaning and preparation of guidelines for their next trip (loaded with food, drink and equipment for sleeping) are centrally managed in the modern plant. The remarkable thing is that in the plant all these services in one place and "almost in passing" can be done. Also at Matzleinsdorf schedules are now planned for more than 500 passenger trains and railcars.

The base consists of a factory building, workshops for Austrian Railways ÖBB Technical Services and Production, a hall for the relief train, refuelling point and seven tracks each 700 meters in length, sidings and space for 41 locomotives. Inside the main hall, train preperation, maintenance of passenger coaches and locomotives, and technical cleaning is undertaken. Also is included several elevated tracks for the maintenance of long-distance and local trains as well as three tracks with individual work stands for passenger coaches and

locomotives.

The whole area is 1.4 kilometers long and wide at the widest point of 180 meters. Its construction began in mid January 2008 and were largely completed in December 2009. Some small manufacturing activities will run until April 2010. From 2012, the base will be fully functioning.

Benefits for employees and customers will include

- 1. More efficient work processes for cleaning, loading and unloading of the train.
- 2. Shorter distances, quicker turnround, since the compilation of the trains have to travel less within the depot.
- 3. Better resource planning: In order for a train to be kept in service, it is necessary to coordinate staff and equipment of various societies, the new base reduces the distances and speeds up the decision-making.



# Tango! Geneva Public Transport's (TPG) 32 new trams to be produced in Switzerland

Tango. That is the evocative name of the new trams that will begin entering service throughout the Geneva region's public transportation network by the end of 2011. Last June, the planned purchases were publicly put out to tender in order to implement the canton's structure plan for public transportation between 2011 and 2014. The winner of the tender was the Swiss company Stadler Rail. The procurement includes the delivery of 32 new vehicles in the time period from 2011 to 2014 and will be worth a total of CHF 154 million, value added tax excluded. The new trams will complement TPG's existing vehicle fleet for the significantly extended metre-gauge network and will meet requirements for future mobility in the growing region of Geneva–Vaud–France. Since 2003, Geneva's tram network has expanded yearly by the addition of a new line or leg. The expansion of lines 14 and 16 to CERN (TCMC project, stage 3) is already on its way to completion by the end of 2010; and after two intensive years of construction, the line to Bernex (TCOB project) should be opened in 2011. The final stage will be marked by the first delivery of TPG's newly acquired Tango trams. This vehicle type from the Swiss company Stadler Rail is already in service in tram networks such as Basel's.

With the ongoing expansion of its tram fleet, TPG is responding to both increasing demand and the Canton of Geneva's goal to increase its services by 30% in the time period from 2011 to 2014. In addition to the continuous improvements to its tram network, TPG aims to offer the population an even more efficient public infrastructure. On 21 December 2009, TPG's Board of Directors awarded the tender for the delivery of 32 new vehicles, with 2 options for either 14 or 10 additional trams, to the Swiss company Stadler Rail. The Swiss manufacturer's offer of CHF 154 million (value added tax excluded) was chosen because it was the most advantageous economic variant, conforming to the inter-cantonal agreement on public procurements (AIMP or Accord intercantonal sur les marchés publics).

Each of the new trams for TPG are bidirectional vehicles with five articulations. They are 44 metres long and 2.30 metres wide and weigh 57 tonnes, having a capacity of 261 passengers, 88 of which are seated. The seven platform-level entrances with folding doors provide sufficient space for wheelchairs and thus meet legal public transport requirements for disabled people. All nine vehicles will be equipped with the comfort features provided by trams of the latest generation: air conditioning, heating, folding ramps between the vehicle and ground,

customer information systems and video surveillance. They offer passengers and tram drivers the greatest comfort thanks to air-suspension bogies with exceptional running smoothness. TPG is delighted to have secured this new collaboration with a local company. The Swiss consortium Stadler Rail Group was founded in 1942 and has a workforce today of over 2,400 people at 8 locations, 3 of which are in Switzerland (Bussnang, Altenrhein and Winterthur). The Group specialises in regional and suburban transport, city railways, and the tram and rack-and-pinion vehicle segments.



# Last year fewer people traveled by train, but you choose a longer route, which reflects positively on sales

Like other carriers, the Czech Railways recorded an outflow of passengers last year, (passengers = not the number of people, but the number of journeys made). Compared to 2008 it was 7% less. In terms of absolute numbers a decrease from 175 million in 2008 to 163 million journeys in 2009.

Factors which are reflected in the number of "passengers" within the bulk of public resources are few but can be fairly accurately traced by the sale of individual tickets.

#### Displaced workers

Obviously there reflected the impact of economic crisis and redundancies, especially in administration or services. Roughly half of the decline are regular travelers who commute by train to work in the ticket line (6 mil.cest / 400 for a year en route to the ticket per person = 15 000 passengers). The decline culminated in the 4th quarter, which also follows the development of unemployment.

#### Students 15 to 26 years

Another large group of students are in the age range 15 to 26 years, which is related to demographic changes, which gradually reduces the number of people in this age range. There also was the fall in prices of fuel and passenger cars, which became more accesible for the young people.

#### Tourists

Crisis, of course, also affected recreational travel, and Europe has lost much of its traditional overseas visitors, particularly Americans, Japanese and so on. Now these tourists often used trains to get to Czech from Central Europe.

#### Repair Infrastructure

Major influence on the brains of passengers on specific routes but also have long-term lock on the modernization undertaken by the Railway Infrastructure Administration. This trend can be clearly traced as the lines Prague - Czech Budejovice, Prague - Plzeň - Cheb.

However people travelled more on longer routes, statistics show that consumers increasingly choose the train as the best option for middle and long distances, especially where the use of common and customer fares. The trains that are very busy include the routes Prague - Ostrava, Hradec Kralove - Brno, Prague - Brno and Pardubice - Ostrava.

#### Train is a hit at car show

The ÖBB Railjet is for the first time a star at a car show.

When asked what was left on attending the Vienna Autoshow most impression to come many answers - Bentley, Ferrari, the new eco-initiative of Opel, and ... Austrian Railways Railjet! For the first time the star is a train on a car show - and that is not only due to the imposing appearance. "With the presence at the auto show, ÖBB want to put the environment and especially contemporary combination of car and train in the foreground, because neither of the two transport alone will be able to cope with the mobility needs of people. It will be an intelligent combination of modes needed ", says Gabriele Lutter, Chief Executive Officer of ÖBB passenger AG.

The need for mobility will continue to grow, which also means the future Matthias Horx. He says that work, leisure, and transportation experience reinforced merge and dominate the multi-modal hubs cityscapes. The key to meaningful mobility options is the seamless integration of transport modes car, bicycle and train. This integration, however, concerns not only the pure transfers from one to the other transport, but the very conscious choice of clients - depending on the current need. Along his way, people expect very specific services. Increase a customer into a ÖBB railjet one, then he does so because he can work here because it is very comfortable to read, eat, rest or chat. He then gets back into the car as it provides the necessary flexibility to the last mile.

The ÖBB is here to go the right way. Because our customers can in 350 P & R facilities easily change from car to rail and vice versa to change trains. And with the Auto Train they can overcome their sleep for a thousand kilometers and more, and then continue their journey by

car. Customers who do not have their own car can change trains at 50 railway stations and find sharing schemes.

VORTEILScard standard moves the railjet at the fair next to the booth of Opel, an official partner of the ÖBB. From this cooperation, customers of out-Minute Car Opel, ÖBB VORTEILScard receive "standard", while owners can look forward an ÖBB VORTEILScard a free vehicle check including topping up of fluids like engine oil, coolant and windscreen wash water at the Opel partner. With the cooperation of ÖBB and OPEL will once again be stressed that a sustainable form of mobility meaningful networking among the various traffic channels requires - for the benefit of mutual customers.

#### Strength & Elegance meet environmental performance & comfort

"We have a top product with the ÖBB railjet - of which we can be proud of and which we can compete without difficulty, not only in terms of comfort and convenience with the latest car models. Moreover, we have on the sector of environmental friendliness - THE topic of the automotive industry -- the nose in front in the future, "said Lutter. The ÖBB railjet combines like no other means of transport, the current trends in mobility. 2010, the ÖBB railjet will again be a top issue. For this reason, the ÖBB at the Vienna Autoshow in 2010 a brand new approach was chosen to demonstrate this is also an audience that otherwise might not think of a trip rather than take the car also with a train.

"For rail travel has dawned with the ÖBB railjet and a new era and we want to demonstrate our presence." said Lutter concluded.



## Stadler to deliver double-decker multiple-unit trains to Germany for the first time

Following lengthy negotiations, at the end of December 2009 BeNEX. Arriva and Stadler Pankow signed a contract for the supply of vehicles for the "Netz Stadtbahn" transport tender in a deal worth approximately EUR 146 million.

The order is for the supply of 16 four-carriage DOSTO type electric double-decker multiple-unit trains, 1 single-carriage Regio-Shuttle RS1 type diesel motor coach and 6 two-carriage GTW 2/6 type diesel motor coaches. The Berlin-Brandenburg transport network (VBB) awarded contracts for transport services on the commuter railway network in mid-2009. The order was broken down into 4 batches, and ODEG won the contracts for batches 2 and 4. ODEG – Ostdeutsche Eisenbahn GmbH will commence operations on the Berlin-Brandenburg commuter railway network with the ordered trains, i.e. routes RE 2, RE 4, RB 35, RB 33 and RB 51, in phases.

The Regio-Shuttle RS1 and GTW 2/6 type vehicles will commence operation with the 2011 timetable change, whilst the double-decker multiple-unit trains will enter service in 2012.

"This is the largest order we have ever won here in Pankow," explains Michael Daum, Director of Stadler Pankow GmbH. "We are very proud to build vehicles for the Berlin-Brandenburg region. This order represents another important milestone for us. Our new product, the double-decker multiple-unit train based on our tried and tested FLIRT. has successfully entered the

"enabling us to expand our production site in Berlin-Pankow even further. We are also planning to establish our own bodyshell production in the region."

The newly-developed four-carriage double-decker multipleunit train has a total of 420 seats, 24 of which are in first class. The interior also includes 4 wheelchair spaces and 36 designated bicycle spaces as well as 3 WCs, one of which is signposted as a large disabled toilet.

The Regio-Shuttle RS1 is a single-carriage, dieselmechanical vehicle with low-level access. It has 71 seats, 2 wheelchair spaces and the ability to carry up to 10 bicycles.

The RS1 is powered by 2 diesel engines that comply with the latest requirements for environmentally-friendly exhaust emissions (Stage III b). The bright, inviting passenger area also has a disabled toilet and a modern passenger information system. The GTW 2/6 is a dieselelectric vehicle with 2 engines situated in a traction module between the passenger areas. The two-carriage train has 100 seats, a disabled toilet and a modern passenger information system. As with the Regio-Shuttle RS1, 2 wheelchair spaces have been provided, along with the capacity to carry bicycles (also up to 10).



## Alstom receives an order worth approximately €130 million from **SNCF** to supply a further 19 Regiolis regional trains

The SNCF (French national railways) has placed an order worth approximately €130 million with Alstom Transport for an additional 19 Regiolis regional trains from the Coradia Polyvalent range. This order falls within the framework of the contract signed on 27 October 2009 with the SNCF and financed by the French regions. The initial contract consisted of a firm tranche totalling €800 million for the supply of 100 Coradia Polyvalent trains.

The first 119 trainsets will be distributed between the regions of Alsace, Aguitaine, Lorraine, Midi-Pyrenees, Pays de la Loire, Provence - Alpes - Cote d'Azur and Picardie. The total number of Coradia Polyvalent trains could eventually reach 1,000 units, generating over €7 billion. Deliveries are scheduled to begin in 2013 and end in mid-2015.

The highly modular Coradia Polyvalent range is a single-level regional train offering several different technical configurations along with modular fittings for passengers. It can travel at up to 160kph in both its electric or hybrid versions and operates at two different voltages (25 kV and 1500 V). It is also available in a transborder version for operation on the German and Swiss rail networks at a voltage of 15 kV. This low-floor regional train offers travellers optimal accessibility and full all-point visibility for improved security. Motor bogies are positioned at the ends of the carriages to limit vibrations and noise levels.

The Coradia Polyvalent consumes about 15% less energy than its competitors (hence reducing CO2 emissions) and its design incorporates eco-friendly materials. It is equipped with more compact, more efficient permanent magnet motors, compared to traditional electric motors. The technical choices incorporated into its design serve the twofold purpose of facilitating maintenance and optimizing life-cycle cost.

All the equipment will be designed, produced and assembled at Alstom Transport's French sites.

# Alstom to equip 449 vehicles with its ERTMS-based train control solution in Austria

Austrian Railways ÖBB has entrusted Alstom Transport to equip 449 vehicles (locomotives and cars) with its ERTMS -based train control solution ATLAS. The contract is worth around € 90 million. The solution will be first adapted for OBB by Alstom in its site located in Charleroi (Belgium). Its components will be produced in Alstom sites located in Villeurbanne (France) and Verona (Italy). The solution will then be installed by ÖBB TS (Technical Services) in its workshops in Vienna and Linz (Austria). Deployment of ATLAS solution starts in 2010, the project will be finalised in 2014.

Additionally, Alstom will implement its on-board Specific Transmission Module solution (STM). This solution will enable vehicles to run in neighbour countries with their national train control system without traffic interruption. 3 types of vehicles will be equipped: 332 Taurus locomotives (class 1016/1116), 50 multi-system locomotives (class 1216) and 67 railjet control-cars (class 8090).

"By selecting the ATLAS ERTMS-based solution, the Austrian Railways ÖBB allows us to make a big step towards standardization of the European rail traffic", says Martin Lange, Managing Director of Alstom Transport Germany and Austria. Austria is indeed a core market for ETCS as a large part of the European transit traffic runs through this country. The vehicles should not only take up service again in Austria (on a part of the European Freight Corridor B under ETCS Level 2 supervision), but also in the neighbouring countries of Germany, Switzerland, Italy, Slovenia, the Czech Republic and Hungary (on one line using ETCS Level 1) as well as in other East-European countries where they run in cross border traffic.

Once the project is fully implemented, ÖBB will operate one of the largest vehicle fleets equipped with ETCS Level 2.

# Alstom starts AGV tests on the Italian rail network

On 7 January, the prototype of the AGV\* arrived in Italy to undergo a series of tests that will enable operator Nuovo Trasporto Viaggiatori (NTV) to run its AGV fleet on the Italian network from 2011. Alstom will begin speed runs on 14 January and will also carry out tests to validate and approve signalling and safety equipment prior to approving the AGV serie destined to NTV.

The AGV - Alstom's fourth generation high-speed train - will cover over 60,000 kilometres on the Italian rail network between January and July 2010. The prototype will run initially on the conventional Rome-Florence line, then on a portion of the high-speed Rome-Naples line, and finally on the "direttissima" between Rome and Florence. During the acceleration tests, it will achieve a maximum speed of 335 km/h. The new series of tests follows those carried out during the past two years at the rail test centre in Velim (Czech Republic) and on the East European high-speed line (France). The prototype has already been operating for nine and a half months and has covered nearly 55,000 kilometres.

Ten engineers from various Alstom Transport manufacturing sites will make up the teams that will take it in turns to travel on board the prototype between January and July 2010. The measurements and data collected by the 2,000 sensors fitted to the trainset will be transmitted to Alstom's engineering departments. The AGV is due to be certified for the Italian network by mid 2011.

In parallel with these tests, Alstom is continuing with the manufacture of 25 trainsets ordered by the operator NTV. Having begun in December 2008 at La Rochelle in France, manufacture then started at Alstom's Savigliano site in Italy in July 2009. The first trainset will leave the Alstom factories in Autumn 2010, and will also embark on a series of tests on the Italian rail network that will complete the certification process.

The Italian railway operator NTV awarded Alstom a €650 million order for 25 new generation very high-speed AGV

trainsets. The contract also covers the maintenance of the trains for a period of 30 years (the cost of which is not included in the contract) and includes an option for 10 more trainsets.

The AGV has been designed under the latest European interoperability standards, and meets European and Italian environmental and safety standards. Its traction system, which enables the AGV to travel at commercial speeds of up to 360 km/h, played a central role in the performance of the train which set the new world rail speed record of 574.8 km/h on 3 April 2007.

# DB driven modernization of the fleet continue to progress

The largest order for new investment vehicles in the history of Deutsche Bahn has been made a preliminary decision. "We now have our industry partners on a new status in the tendering process up to 300 trains on new information for long distance," says the CEO of Deutsche Bahn AG Dr. Rüdiger Grube in Berlin. "Siemens is Preferred Bidder" in this tender process. Even in difficult economic times, the modernization of our fleet has the highest priority for us. This process, we are advancing in the coming months, with emphasis. "

In the so-called ICx-tender is about an order of magnitude of several billion euros for the next generation of IC/EC- and ICE-1 and ICE-2 fleet. Following this precedent now focus further detailed negotiations on design and technical features of the new trains on the system house ICx Siemens.

DB Technology Officer Dr. Volker Kefer. "The new trains, the quality of the technology will be a central theme. To fix milestones for quality assurance for us is a crucial point in the negotiations."

ICx The new trains are the platform for the new generation of vehicles in the mainline of the IR. By the summer of this year, the appointment shall be made of these trains.

## From the UK



























# **From the Archives**













SNCF's BB 22404 stands at Rennes on August 22nd 2002, just another one of the fleet at that time but between 1994 and 1995 it was one of nine BB 22200s that were used for hauling freight trains through the Channel Tunnel as the Class 92 locomotives were not yet delivered. Brian Battersby