



Eurobahn's New FLIRT 3 EMUs

Starting in December 2017 the German operator Eurobahn, a brand name used by Keolis Deutschland, will take over passenger services on the Teutoburger-Wald-Netz (TWN). For this Eurobahn won a 2014 tender invited by the Zweckverband Nahverkehr Westfalen-Lippe (NWL) and Landesnahverkehrsgesellschaft Niedersachsen (LNVG) transport authorities, together with the Dutch province of Overijssel and Twente region.

The Teutoburger-Wald-Netz consists of four RegionalBahn lines, RB 61 Bielefeld to Bad Bentheim and Hengelo in the Netherlands (the Wiehengebirgs-Bahn), RB 65 Münster to Rheine (the Ems-Bahn), RB 66 Münster to Osnabrück (the Teuto-Bahn) and RB 72 Herford to Altenbeken and Paderborn (the Ostwestfalen-Bahn). All these are currently operated by Westfalenbahn. Eurobahn will also take over one Regional Express line, RE 78 Bielefeld to Minden and Nienburg (branded as the Porta-Express), which is currently operated by DB Regio.

Eurobahn's 15-year contract, until December 2032, involves the provision of 5.3 million train km per annum. For TWN services 27 FLIRT EMUs are to be used. Of these 19, 14 three-car (0427 109 to 122, ET 001 to 014) and five five-car (0429 001 to 005, ET 015

to 019), built in 2007 and leased from Alpha Trains, will be taken over from Westfalenbahn.

The other eight, destined for the hourly services on RB 61 to Hengelo, will be new five-car FLIRT 3 EMUs, ordered from Stadler Pankow in September 2015 and also leased from Alpha Trains. These are 160 km/h triple-voltage trains (1.5 kV DC, 15 kV AC 16.7 Hz and 25 kV AC 50 Hz) equipped with ETCS L2, German PZB and Dutch ATB ATPs. They have a Bo' 2' 2' 2' 2' Bo' axle arrangement, are 90,800 mm long, 2,880 mm wide and 4,120 mm high above rail top. Each car has just one pair of double-leaf entrance doors. Seats are provided for 266 passengers, and there is space for up to 319 standees. Two wheelchair harness points are provided, together with two WC cubicles, one of which is wheelchair-accessible. The trains thus fully conform with TSI PRM standards.

The first of the new FLIRT 3s delivered was ET 4.01 (EVN 94 80 2429 011-6 D-ERB) in late March 2017. The last of the batch, ET 4.08 (EVN 94 80 2429 018-1 D-ERB) is scheduled for delivery in autumn 2017. **This photo, taken on 28 June 2017, shows ET 4.02 (94 80 2429 012-4 D-ERB) in the Berlin-Wilhelmsruh industrial estate, where the Stadler Pankow factory is situated.**

Sven Klein

First Bimodal FLIRT

On 15 June 2017 at Bussnang Stadler presented its very first electro-diesel FLIRT 3, one of a batch of five ordered by the Regione Autonoma Valle d'Aosta. Attending the event were representatives from the Regioni di Valle d'Aosta, Piedmont, Molise and Calabria, together with various operators.

The Class BTR813 FLIRTs were ordered by Valle d'Aosta in May 2015 for 43 million EUR, with five years of maintenance included, and an option for five more trains. They are to be used from May 2018 on Torino - Aosta line, operating off 3 kV DC as far as Ivrea, the rest of the line to Aosta not being electrified.

The trains have a Bo' 2'2'2'2' Bo' axle arrangement (the three passenger cars and a power module with two eight-cylinder Deutz diesels), a maximum power rating of 2,600 kW and a top speed of 160 km/h when operating off 3 kV DC, and of 700 kW when running under diesel power, with a top speed of 140 km/h. Starting tractive effort is 200 kN. The trains are 66,800 mm long, 2,820 mm wide and 4,120 mm high above rail top, and the maximum axle-load is 18 t. The first train is now being subjected to authorisation testing.

Stadler

Photo: Jürg D. Lüthard



BLS Orders 58 FLIRT EMUs

On 2 May 2017 Stadler was nominated as the preferred bidder by BLS in an invitation to tender from September 2015 for 58 new EMUs. There were only two bidders, Bombardier and Stadler. The contract is worth 650 million CHF. There then followed a 20-day period allowed for appeals, but none were received, so the definitive contract with Stadler is now scheduled for signing in autumn 2017. This is BLS's largest single order for new trains in the company's 104-year history.

All the trains will be 105 m long six-car FLIRT EMUs, operating off 15 kV AC 16.7 Hz. The trains will be designed for a maximum service speed of 160 km/h. 30 of the new FLIRTs will be used on RegioExpress services, while the 28 others will be deployed on the S-Bahn Bern network. The FLIRTs will feature spacious entrance vestibules, comfortable passenger accommodation, plenty of luggage storage areas, and at-seat power sockets in both first and second class. Good mobile phone signal reception will be available, while the RE trains will also have catering facilities equipped with vending machines.

BLS developed the standards to be used for the interior design and on-board equipment of the new trains working together with the rail users' organisation Pro Bahn. For instance, testing and feedback involved the type and design of seats to be installed. As detailed planning of the new train progresses, feedback from representatives of train user groups will again be closely involved.

Following the trains being subjected to intensive testing and authorisation, the fleet will be drafted into service, with deliveries scheduled to run from 2021 to 2026. The FLIRTs are to replace 43 ageing Type EW III locomotive-powered push-pull rakes, and Class RBDe 565 and Class RBDe 566II EMUs.

The RegioExpress FLIRTs are to be used mainly on La Chaux-de-Fonds - Bern and Bern - Spiez - Brig - Domodossola/Zweisimmen services, and also on various other RE routes. The S-Bahn FLIRTs are for general use on the capital's suburban network, which over the coming years is to be extended, with a consequent increase in patronage.

BLS



HZL Orders Coradia Lint DMUs

On 24 May 2017 Alstom received a 50 million EUR order from Hohenzollerische Landesbahn (HzL) for ten two-car 140 km/h Coradia Lint 54 DMUs for local services in Baden-Württemberg Land. The trains are to be built at Salzgitter works and are to be delivered in April and May 2019. They are to be used on RE services between Ulm and Aalen, Ulm and Langnau, and Ulm and Munderkingen. They will be the first Coradia LINT DMUs to be used on services within Baden-Württemberg.

They will have seats for 150 passengers, space for up to 18 bikes, and their entrance doors will have a threshold height of 628 mm above rail top. The seating configuration will be spacious, with tables for the use of laptops provided at most seats (apart from at tip-up seats). Real-time passenger information will be provided, and CCTV will be installed.

HZL is a private railway company, whose shareholders are Land Baden-

Württemberg (72%), Landkreis Sigmaringen (14%), and Zollernalbkreis (14%), and whose history dates back to the end of the 19th century. It has six lines of its own, Eyach to Hechingen (28 km), Hechingen to Gammertingen (27 km), Kleinengstingen to Sigmaringen (43 km), Sigmaringendorf to Hanfental (10 km), Hüfingen Mitte to Bräunlingen Bahnhof (2.5 km), and Balingen DB/HZL to Schömburg (13 km).

HZL has a fleet of 48 Class VT200 RegioShuttle RS1 diesel railcars, together with a number of diesel shuttlers for freight duties, most of these built during the late 20th century by Gmeinder. The RS1s are used both on HzL's own local lines and on around 430 km of lines belonging to DB Netz and other infrastructure managers. HzL also operates a network of local bus services. In 2016 patronage of all these services amounted to 13.1 million.

Alstom