

FV-Dostos Start Provisional Commercial Operation

By the end of November 2017, SBB's Bombardier-built TWINDEX Swiss Express EMUs had received provisional authorisation for commercial service from BAV (see R 6/17, p. 9). **The first passenger-carrying service ran on 26 February 2018, formed by RABe 502 207 (on the right), departing from Zürich HB as IR 2368 bound for Olten and Bern. On the left stands RABe 502 402 as a reserve, together with TGV Lyria's unit POS 4417 forming TGV 9218 service to Paris.**

FV-Dosto stands for Fernverkehr-Doppelstocktriebzug (Long distance double deck train), and these new units are now to be used on SBB's IR services between Zürich and Bern and RE services between Zürich and Chur. They will also later be used on St. Gallen - Bern - Genève Aéroport services, and possibly also on other routes. All now depends on when the BAV grants them unlimited use, and this is hoped for prior to the start of the 2019 timetable.

But the new trains have not been universally welcomed. In late January 2018, the Bern-based umbrella association for organisations catering for the needs of disabled people, Inclusion Handicap, lodged an appeal with the Swiss civil court (Bundesverwaltungsgericht, BVGer), asserting that the trains did not meet all the requirements of handicapped passengers. It requested that the deficiencies be rectified before the trains were put into regular service. It was also stated that since most of the batch of FV-Dostos had not yet been built, design modifications should be fairly straightforward.



The matter was thus complicated somewhat by legislation. The FV-Dostos were originally envisaged for use on international services into Germany and Austria. These countries have to follow TSI guidelines, including of course TSI-PRM. Switzerland, although not being an EU member, agreed to follow TSI requirements in the design of its trains. National requirements differing from TSI specifications have to be indicated in the binding NNTVs (Notifizierte Nationale Technische Vorschriften - Notified national technical rules). Applicants for these modifications are required to demonstrate that their design complies with both the pertinent TSIs and their NNTVs. Exemption from certain design specifications are then granted by the responsible federal authorities.

Inclusion Handicap appealed against 15 deficiencies. Among these were some gadgets in the vicinity of the entrance doors, such as the open/close buttons, which are situated too high for

wheelchair-bound passengers to use, the positioning of the grab handles at the entrance doors, and the reflections on the text panels, which made them difficult to read by people with poor eyesight. Also mentioned was the lighting on the mirrors in the WC cubicles. The steepness of the wheelchair ramps at the entrance doors also came in for criticism, the gradient being impossible for some wheelchair-bound passengers to leave the train without an assistant. The NNTV PRM standard requires wheelchair-users to be able to board a vehicle from the platform, without help, from at least one set of entrance doors, specifically designed for this purpose, per train.

Inclusion Handicap stated that it intended to try to prevent the BAV granting unrestricted authorisation for the FV-Dostos after 30 November 2018 unless a decision was taken to rectify all the 15 design deficiencies. SBB fought back. It stated that the wheelchair ramps did meet all required standards, and that

the gradients on them should have been tested and validated with wheelchair users using the two-car full-size mock-up from 2011.

On 6 March 2018 the BVGer reached its decision, in favour of SBB, and announced that all FV-Dostos could be put into test commercial service. An interim decision was first taken on 14 February, the court then withdrawing the appeal lodged against the first six trains. Of the latter, two are of each type (IR 200, IR 100 and IC 200) being built. SBB is now able to deploy all its new FV-Dostos after completion, and verify their functional capability in daily service, as a part of the putting into regular service programme.

In the past the trains were also the targets of complaints by various associations of handicapped passengers. For example the original 2011 design proposals of 20 Class RABDe 502s (IC 200) had a bistro on the upper deck of one of their cars, inaccessible for wheelchair-bound passengers (see R 5/12, p. 32). The complaints and appeals resulted in the whole project being delayed from the early days of its history.

SBB asserts that it takes the requirements of handicapped travellers seriously. Its SBB Call Center Handicap offers staff assistance with boarding and alighting from IC and some IR trains. The operator also claims that handicapped passengers are able to use 78% of all services operated, whether travelling alone, or with staff assistance. Moreover, over half of SBB stations are now classed as barrier-free.

Jan Dvořák

Photo: Jürg D. Lüthard

AB Transio Orders More Dosto EMUs

On 14 February 2018 Stadler and Stockholm-based AB Transio signed a contract for eight more four-car double-deck EMUs, these to be used by Upplands Lokaltrafik (UL), see artist's impression. The trains will be used on local and suburban services between Uppsala and Gävle in a service called Upptåget. Until 2012 Upplands Lokaltrafik was a public transport company fully owned by the Uppsala Län (County) and the municipalities in the Län. Since 2012 UL has no longer been a separate company. It is owned by Uppsala Län. Its formal name is Kollektivtrafikförvaltningen UL (UL Public Transport Administration). UL is no longer an abbreviation but is still used as the public transport operator's trademark.

Image: Stadler



This is the first of the options derived from the framework contract signed in 2016, which was for 33 four-car 200 km/h double-deck EMUs, with options for up to 110 more (see R 3/16, p. 50). The 33 trains are to be used on local services operated by MÅLAB (Mälardalstrafik AB) in the vicinity of Lake Mälaren, west of Stockholm, and the first are to be delivered in March 2019. The latest eight are scheduled for delivery in 2019 and 2020. The contract for these trains is worth 900 million SEK (around 91 million EUR). They will be financed by AB Transio, which will then lease them to UL.

As in the case of the original batch of 33 DOSTOs, Stadler will with this batch of eight trains make use of components supplied by Swedish manufacturers, such as Icomera, Kockum Sonics



and Hök Instrument. **The final assembly of the first of AB Transio's trains started at Stadler's Altenrhein works in early 2018 as shown in the upper photo of MÅLAB's Class ER1.** The first of these trains is scheduled for delivery to Sweden during summer 2018, for testing.

The bodyshells of these trains will be re-scaled to comply with the Swedish loading gauge, which is more generous than that found in continental Europe. All the DOSTOs sold to Sweden will be fitted with ABB's BORDLINE CC1500 Compact Converters and Resibloc dry traction transformers, which do not require oil as a coolant and insulation. They are already in use on Mariazeller-

bahn's Himmelstreppe EMUs and the metre gauge EMUs delivered to MBC (Morges-Bière-Cossonay) and TRAVYS (Transports Vallée de Joux, Yverdon-les-Bains, Ste-Croix).

These traction transformers, installed in 2016 on an SBB FLIRT RABe 523 066, resulted during tests in the total energy consumption of the train being reduced by around 8%. In 2017 these were fitted also to a small fleet of FLIRT EMUs: four trains, 523 074 - 077, belonging to Transports Publics Neuchâtelois (TRN), and seven SBB trains, RABe 523 067 - 073 (FLIRT RegiOlten).

Jaromír Pernička

Photo: MÅLAB