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# Swiss News

## Passenger demand planning

SBB has an elaborate computer model, SIMBA, for the forecasting of demand and load factors in passenger traffic. This is a necessity as the Finance and Infrastructure Plan FABI, adopted by majority vote in 2014, demands adequate planning support for setting priorities. There is also a process called STEP, strategic development programme for rail infrastructure, which ensures that appraisals, including the economic rating of different projects, are uniformly undertaken. SRS-Members may occasionally find themselves, especially with a Swiss Pass, asked by researchers, what journey they are making. Their answers go to update a database, built up since 1999, to supply the modelling process. This also clarifies how the whole integrated service is not simply a political objective, but is also based on a system-wide coherent planning process. The process is described in detail in the January 2016 edition of the German (or French) language Schweizer Eisenbahn Revue, and is much too complex to give a précised translation here. A detail on the side might interest readers, however. This was the average recorded workday use (joining and leaving trains) at major stations in 2014, as is used in the model. The figures are: Zürich HB – 441,000; Bern HB – 203,000; Basel SBB – 113,000; Lausanne – 107,000; Winterthur – 105,000; Luzern – 92,000; Olten 78,000, and Genève – 71,000. Of course, such numbers are not strictly comparable, as they include all kinds of travel and also connections. At rush hour Genève may well be busier than Olten, but the figures provoke thought. Interestingly London's, and the UK's, busiest station on Network Rail is Waterloo that has a daily throughput of some 250,000 people, not much higher than Bern HB!

## Gotthard NEAT Project - Ceneri Tunnel

The twin bores of the 15.5km long base tunnels under the Ceneri, a vital part of the overall NEAT project, were both broken through in January. A late addition to the project was the introduction of a curve between the Locarno and Lugano lines on the valley floor at the tunnels' north portal. When the route is complete this will greatly shorten travel time between these two important Ticino centres, as for 13 years passengers have had to change trains in either Giubiasco or Bellinzona.

## Base Tunnel Tests

A 1,500-metre freight train has been tested through the Gotthard Base Tunnel. Consisting of 76 flat, telescopic and container cars, the test train made a pass through the tunnel to ensure that its ETCS Level 2 signalling works with longer freight trains. Weighing more than 2,000 tonnes, the train was hauled by three Re 620 electric locomotives. This follows a series of tests with 1.5km long trains in 2014 by various European operating partners, including SNCF and Trafikverket. By the end of May, around 3,500 separate tests will have been completed as part of the tunnel's commissioning process. A trial service will begin in June before the tunnel officially opens with the timetable change in December.

## New Bozberg Tunnel

On 9th March a ground breaking ceremony was held to mark the start of construction work on the new Bozberg Tunnel

on the Basel-Zürich line. The CHF350m scheme is for a double track tunnel that will closely parallel the existing 2.7km long tunnel between Effingen and Schinznach, but will be built to a more generous loading gauge that will allow passage of double-stack container trains on the Gotthard route. Following pre-construction work that commenced last autumn boring should be complete by end-2017, with opening to traffic scheduled for 2020. The original 1875 tunnel will be retained for technical and emergency use.

## SBB Track maintenance - Troubles and Remedies

A costly problem has been making itself apparent; the overall condition of the track network is deteriorating, and insufficient attention has been paid to day-to-day maintenance. This sounds like an echo of the situation that happened in Britain's Railtrack era - but it is not yet so extreme. There is an examination process, inaugurated in 2013, which allots a score for various features. This has now shown that the deterioration in years from around 2000 has been reversed, but at considerable cost. Trends were that firstly, speeds, frequencies, and rolling stock were all imposing increasing wear, for which a reduced maintenance budget made no allowance. Secondly, new lines and layouts were being introduced, which needed in the short-term no maintenance, but which took their revenge too soon, since they were being used more intensively than had been planned. External policies encouraged competition for new freight traffics whilst Locomotives, EMUs, etc. have all moved into a new generation of performance, capacity and loading, in which the effect of track costs was too little considered. Allied to this was, that in some cases properly programmed renewals did not match up to demands of new operating methods currently in planning.

Some of this is clearly a left hand/right hand story of inter-related forces being independently developed without regard for their implications. Accepting that this was not the way forward the BAV (Federal Transport Office), which has in the end to find ways to pay, has laid down a catalogue of recommendations. Some of these are market-related, such as introducing incentives in track pricing for less damaging rolling stock design. Some are in management structures, such as incorporating logical cost effects into business plans. Some concern infrastructure design and building such as improved alignments, and especially track work, with related operating rules. This includes, for example, the observed practice that points at station layout thresholds fail today more frequently, because to optimise times, headways and path use trains are entering layouts at higher speed and with brakes applied. That is, they are being driven harder to cut operating costs, but it is the infrastructure which has unwittingly been paying the bill.

As always there is the political side! The maintenance budget was kept as low as possible, because the political finance debate at Canton and Federal level, to guarantee operating costs for contracted levels of service, is always sensitive. Track access charges were thus unrealistically low. The net effect is that various factors have combined to increase maintenance needs and costs just at a point when funding was falling behind. As every rail manager from the LMS, to the US Railroads, to Railtrack knew, you could hide a lot, but this could only go so far. A final note by the BAV is an object lesson in truisms. In recent years, they solemnly write, repeated reorganisations, redundancies, retirements, etc. have



meant that expertise and experience have been lost and that the strategic discontinuities observed are a result of this. Somehow all this seems familiar! But be reassured. Standards are still very high, and it is observed that even the harmonised Technical Interoperability Standards (TCI) of the EU would not be high enough to meet the demands of frequency, curvature, gradients, axle loads and speeds, which are practiced in Switzerland. It costs more, but the work will be done.

As a finale to this it was announced in March that a new track access charging scheme is to be introduced in 2017. This is SBB's Wear Factor Model, where organisations that use more damaging locomotives and rolling stock will pay higher fees for usage, rather than the current calculation method that is based on gross tonnes.

### No trains to Delle this summer

Readers who intend to make the long pilgrimage to Porrentruy and beyond risk disruption to their travel plans up to the 28th August. From the 29th February SBB/CFF trains are only running to Boncourt, and not the last 1.5 km across the frontier to Delle, although there is a connecting bus. The reason is the rebuilding of Delle station by the SNCF to accommodate through trains to and from Belfort commencing in 2017. This is a finishing touch to the Rhein-Rhone LGV route between Mulhouse and the Doubs valley, opened three years ago. When completed the Delle – Belfort line will connect at Belfort-Monbéliard with the TGV services and continue to Belfort SNCF, on the alignment that was opened in haste in 1872 to Porrentruy, after Prussia occupied Alsace. Completed in 1877 to Delémont and beyond, it was for nearly 40 years the main route to Switzerland for the 'English Trade' – passengers from London travelling via Calais and Boulogne to the Swiss Alps. Passenger services north of Delle were discontinued by SNCF some years ago although they continued to own the infrastructure. Following the reopening of the line across the border in 2006 the station, which is some 480m inside France, has been served by SBB/CFF as the terminal for the hourly Regional Express service from Basel. With the new connection, operations revert to SNCF and this means new signals and other fittings.

### MOB/MVR

In 2014 the management of these jointly operated railways ordered eight new GTW ABeh2/6 units to be numbered 7501-7508 for use on the line between Vevey and Les Pléiades. The first units arrived from Stadler last October, with others following at monthly intervals. The arrival of this new equipment will allow the early-model GTW units Nos. 7001-7004 (built 1997/8) to be released to new owners; ASm (3 sets) and MIB (one set). The new trains are rack-equipped enabling the older railcars Nos. 71-75 that worked the rack-equipped section from Blonay to Les Pléiades to be retired, although some equipment is to be retained. With the addition of the new units increased frequency on this busy line serving Vevey's hillside suburbs is planned. The units arrive in the MOB/MVR's elegant new livery of dark blue over cream/white and carry neat new logos. Other existing units are now appearing in this colour scheme that appears destined to totally replace the garish gold/white colour scheme that was introduced at the formation of the 'goldenpass' marketing group. There are more details of some of the MOB's other current activities on Page 11. Amongst these is the now-advertised planned opening in 2018

of the through service from Montreux to Interlaken, using coaches specially equipped with the variable-gauge bogies developed by the MOB. Also on 21st November the MOB opened the rebuilt Château d'Oex station. A description of this is in an article on Page 10.



The new MOB Logo.

Photo: Peter Bowen

### New station at Neuhausen (SH)

Since the timetable change on 13th December Zürich S-Bahn services S9 and S22 have served a new halt at Neuhausen Rheinfall. Apart from serving the southern part of the Schaffhausen suburb of Neuhausen this station now gives a new and easier access to the famous Rhein Falls. These are also served on the other side of the river by the station at Schloss Laufen. The usual way to this spectacular location on the Schaffhausen side of the Rhein has been by bus. On your News Editor's first visit long ago we took the tram from Schaffhausen SBB station. Be warned a visit always involves some steep walking. Unsurprisingly the Falls are best after wet weather.

### Collision in Sihlbrugg with CZm1/2 No.31

A collision occurred at Sihlbrugg at 23.00 on Saturday 20th February involving a special train from Arth Goldau to Zürich HB, comprising one coach drawn by the steam railcar CZm1/2 No. 31 belonging to SBB Historic, and operated by the club 'Dampfverein Zürich'. Sihlbrugg is a closed station on the line Zug – Thalwil located between the Albis and Zimmerberg Tunnels. There are 4-tracks, of which Tracks 3 and 4 form a passing loop for trains on the main line, while Tracks 1 and 2 were formerly used by the Sihltalbahn to terminate its branch line service that was cut-back to Sihlwald some time ago. These two tracks are still connected at each end to the main line. On Track 2 there is a water column, and beyond the main line connection at the Thalwil end is a siding. From Friday 19th February this siding was occupied by a set of heavy hopper wagons used at night by a private contractor for the lengthy Albis Tunnel renovation. These wagons should have been secured safely beyond points and a defined 'clearing point' leaving Track 2 clear. The points to the siding on Friday had shown 'occupied' on the controller's track plan in Zürich. Verbal confirmation was requested, and obtained, that the wagons were safely 'inside' and clear, allowing Track 2 to be used. This information was wrong. When the special train with steam railcar No.31, after taking water on Track 2, was given clearance to start, it collided on the points with the end hopper wagon. The steam railcar was severely damaged at both ends, and 16 persons, of the 59 on board, were injured, including two locomotive drivers and a fireman. It has been confirmed that no blame is attached to the crew on the railcar, who had received a correct 'line



clear' authorisation to leave Sihlbrugg. Examinations of No.31 have allowed, with all caution, plans to be made for restoration to working order hopefully by mid 2017.



CZm1/2 No.31.

Photos: Graham Drew



### Dailiens Derailment Report

This very destructive derailment at Dailiens, south of Yverdon, in May 2015 also released dangerous chemicals and closed the Jura main line for a week. A provisional report has now been released confirming that on one 4-axle VTG chemicals tank wagon an axle roller bearing had been lost, leading within some 500m to a high-speed derailment. Parts of the bearing and suspension were found at the lineside. The report makes clear that the bearing itself was not basically defective, nor had there been a classic 'hot bearing', but that the cover, securing bolts and screw threads which held it in place were severely damaged, and that lubricating grease was polluted by dirt. The report concludes that the routine maintenance and reassembly of the bearing had not been carried-out as laid down, that screws and covers had worked loose, and that the bearing had worked free from the axle. This was confirmed by examination of other bearings on the wagon whose condition was also considered unsatisfactory. Follow-up measures will concentrate on maintenance and testing procedures, and on the conditions found in authorised workshops.

### 800 extra trains by SBB in 2015

SBB reported that last year it offered 800 extra trains for special events and for holiday traffic, and put extra capacity to 950 scheduled trains. The biggest events were again the Zürich Street Festival and the Genève Motor Show. It is also customary for the smaller local train operators to cooperate closely with their local communities and to run extra trains for local events. This year

the opening of the Gotthard Base Tunnel and various related events will have the largest number of extra trains. One of the events will be the "Gigathlon" race, where the athletes will be transported by special trains to various stages around the Gotthard Pass.

### TRAVYS (YStC) Crash Enquiry

A provisional enquiry into the spectacular crash on the Yverdon–Ste Croix (YStC) near Trois Villes last October, as described in the March *Swiss Express*, has revealed some curious things. First we recall that there is a steady 44 % (1 in 24) descending grade from Ste Croix and that the metre-gauge line has safely operated, with steam and later electric power, for many years. However, on 2nd October something went seriously wrong. What that was is still not clear, but at least the consequences are now clearer. An electrical failure had occurred on the unit, resulting in an emergency stop of the descending empty train with full air brake application. The enquiry showed that as a result of a design alteration on the units (Be4/4 No.2 was one of three acquired by the YStC), that dated from their building by ACMV in 1981, a combination of external electric power failure and operation of the air brake valves could allow the air brake system to be emptied of air and become ineffective. Also, as subsequent tests have shown, the handbrake capacity of the railcar and trailer was inadequate to hold the train on the gradient- although this is a basic requirement! Moreover, the driver could not walk through to apply hand brakes on both vehicles, as the gangway was blocked. As a result of the alarm raised by the electrical fault in the unit the catenary had been switched off. This then meant that once initiated the 'runaway' was inevitable as there was no power available to recharge the system. The open questions of how all the elements came about have yet to be answered, but urgent recommendations have been made. These require that the brake systems of similar railcars on both YStC and the Bière-Apples-Morges (BAM) – who also acquired three at the same time - be examined and modified for greater safety. A consequence for daily operations on the line is that the YStC now does not have enough rolling stock to cover all scheduled duties. To assist the situation BAM has returned its Be4/4 No.15, the former YStC No.3 purchased some years ago. This took over the working of the sugar beet trains in November, a big traffic for the railway. The YStC has two Stadler units (from 2001) that cover most of its current passenger operations and is awaiting three new units from Stadler. Two are intended to replace wrecked No.2 and its sister-unit No.1, and the third to allow a 30 min. frequency service to be introduced on the line.

### Aarau- Zürich: a Super-Tunnel?

A study regarding this potential tunnel was announced in March. At present the plan is to build a Chestenberg Tunnel west of Lenzburg to relieve the acute Lenzburg – Olten bottleneck on the main Zürich – Olten – Bern line. A further tunnel, also being studied, east of Lenzburg would greatly relieve the Zürich approaches. SBB and BAV have now proposed that these could be replaced by a single 28km tunnel project, between Aarau and Zürich. This has really put the-fat-in-the-fire. Politically there is serious resentment from Luzern (wanting to get on with the new Luzern through station and its tunnel under the lake) and Basel, waiting for a long-prepared S-Bahn under the city centre and a new bypass line for transit traffic east of the city. More generally it is argued that the scarce funding should not yet again be thrown at



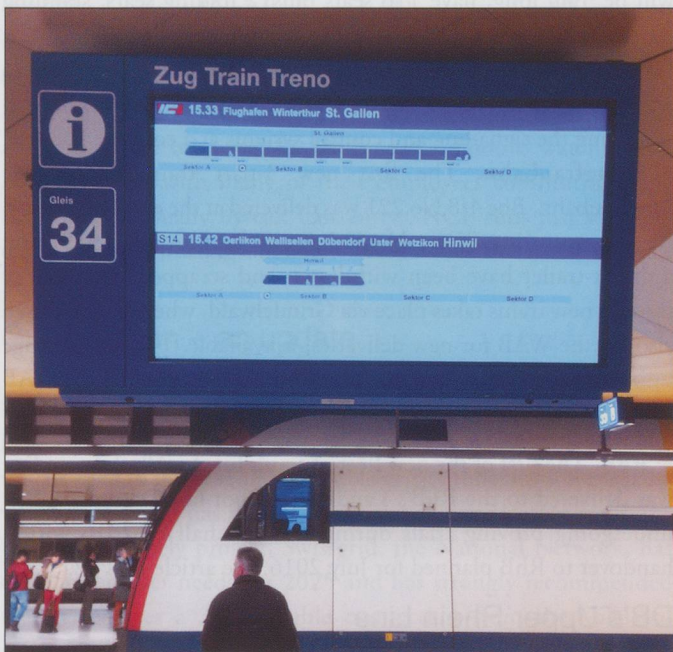
Zürich-Bern; there are more important things to do. The SBB dilemma is however, that the growth forecasts leave it little choice, not this time, to raise speeds, but to increase capacity. In the meantime Lenzburg, as in the past, sees itself cut off. Also, near Lausanne EPFL (the technical university) is pushing for a new line, in tunnel, from Lausanne to Morges with a station at their Campus. However, as the Canton of Vaud and the Confederation are already investing to boost the capacity on the current line, and on a new LRT line (see another news item), it is unlikely that this idea will progress any time soon.

## Lausanne LRT Approved

Public transport in Lausanne (one of Switzerland's fastest growing cities) already benefits from two Metro Lines and rail suburban services on the CFF/SBB and LEB. Now the Federal Office of Transport (BAV) has approved construction of a 4.6km Light Rail Transit line that is scheduled for completion in 2020. The line - to be known as T1 - will run west from an interchange with Metro lines M1 & M2 and the LSE at Flon to Renens CFF/SBB station. It will have ten quite closely spaced stations on its route, that will run on the surface via the Rue de Genève and Avenue des Morges to Préslaz-les-Roses in Malley, then continue to Perrelet, the site of its depot, and on to Renens. One aim of the project is to serve a major new residential development at Renens on a former industrial site, and it is also planned to eventually extend it to Villars-Sainte-Croix. The route will be paralleled by a new cycling corridor, whilst the overall project will also encompass a BRT (Bus Rapid Transit) line from Préslaz-les-Roses to Saint-François. The expected Flon-Renens journey time is 15 minutes with a service frequency of 5-8 minutes.

## New Platform Displays

At Zürich HB, on the new platforms for the Durchmesserlinie - Bahnhof Löwenstrasse (Platforms 31-34), the SBB has installed a new type of platform display that shows the composition of the train, the section of the platform where the train stops and information to assist the mobility impaired, etc. It is unclear if this is a new type of display that will be rolled out to other stations, or is a type specifically for this location.



Zurich HB new platform displays 2. Photo: Ilkka Huotelin

## TPC Bex-Bévioux

The shuttle tram service, long worked by 3-axle-railcar Be2/3 No.15, between Bex and Bévioux was finally withdrawn in the December 2015 service changes. For some years it had only been making one morning trip, now all workings are covered by the Bex-Villars-Bretaye's normal rolling stock.

## WAB Freight Traffic

Sorting out a curious conflict means that readers will still see freight traffic between Lauterbrunnen and Wengenalp on the WAB. In 2014 the WAB had informed the Hotel Jungfrau at Wengenalp that it could no longer provide freight service for the Hotel, as costs were not covered. The Hotel Director appealed to the Federal Transport Office (BAV) who upheld the complaint. The WAB then went one higher, but the Upper Court again ruled in favour of the Hotel. The judgement was that the grounds given by the WAB were trivial; that the natural monopoly of the WAB (as there is no road or other means of transport), requires them to provide reasonable services to users en route, and the Hotel was considered as being dependent on the railway. Also on the WAB traffic was interrupted between 16.00 and 20.00 on 29th December due to a derailment caused by a false point setting at Witimatte, above Lauterbrunnen. This was during the busy holiday period and resulted in hundreds of passengers having to walk around the two derailed vehicles as other trains shuttled either side of the incident.

## Double-tracking

Two new double tracking projects have recently been announced. In December 2020, completion of the Lausanne rebuilding is due, resulting in through fast services between Basel, Lausanne and Genève being reintroduced, on a two-trains/hour pattern. This needs a further high-speed crossing point, which will be installed on a 4 km section between Grellingen and Zwingen on the Jura main line. An agreement between SBB, BAV (Federal Office of Transport), and Cantons Basel-Land and Jura, was signed in Grellingen last November. Another project is for a double track section on the metre-gauge ZB at Hergiswil Matt for completion in 2020. This will enable all Luzern S-Bahn trains on this route to stop at Hergiswil Matt station.

## News from VHS at Luzern

- **An Exhibit Returned** - In March 2012 I was at the Transport Museum to report for Swiss Express on the arrival by road of RhB's Ge 4/4 I No. 602 that was hoisted into a special exhibition spot and greeted with speeches, and the obligatory Apéro. At the time the RhB had decided that this class of pioneering meter-gauge locomotives were obsolete and six were scrapped; No. 602 was earmarked for the VHS and No. 603 went to Augsburg (Bavaria) as another museum exhibit. Things have now turned out differently as powering materials trains for the new Albula Tunnel, plus necessary work on Classes Ge 4/4 II and III, has led to an acute power shortage on the RhB. No.603 has returned from Germany, been overhauled, and returned to service on the Albula main line, along with sister loco No.605. The Class Ge 6/6 II locos, once scheduled to be withdrawn, can again be seen on all sorts of trains. Also the commissioning of newly delivered Allegra units demands additional motive power, so No.602 discretely set-off from the VHS on a low loader to Landquart last November to be overhauled and returned to service. No speeches or Apéro's this time!



## New Wagons for SwissPost

At the end of January (just too late for inclusion in the March *Swiss Express*), Swiss PostMail introduced into service the first members of its new fleet of 55 sliding wall bogie wagons. These are being leased from the Swiss rolling stock leasing company Wascosa and enter the fleet with the designation code 'Habblilnss'. The new wagons, that have been built in Germany, will replace a number of older items of rolling stock and be based at the organisations Härkingen sorting centre, situated midway between Bern and Zürich, which handles 1 million items of post per day. Each 'Habblilnss' has capacity for 63 Europallets in a loading area that can be sectioned-off using movable dividing walls. When operating at 100kph the new wagons have a payload of 63.5t but this reduces to 53.5t at a service speed of 120kph.



Photo: SwissPost

● **New Steam Loco Restoration Project** - A little engine, 0-6-0T Class F3 No.41, was delivered by SLM to the Swiss Central Railway SCB in 1901 - its last before nationalisation. As SBB's E3/3 No.8410 it was a forerunner of the famous 'Tigerli'. Having shunted in Bern, Basel and Luzern until 1941 it was sold to the Von Moos steelworks in Emmenbrücke. Long-since withdrawn she stood forgotten on a plinth until the VHS took her on as a restoration project last year. Boiler, tyres, bearings, motion and brake systems are to be completely overhauled, and many detailed components renewed. Half the CHF655,000 cost is now available enabling work to commence.

● **A smaller C5/6 No.2965** - This locomotive, one of the Gotthard line's last heavy steam freight engines (seen in steam in 1965 at Luzern by your Swiss News Editor), is exhibited in the Rail Hall at the VHS. Admirers of this engine can now buy one, as it has just become the subject of a new Märklin-Trix model that was announced at this year's Nürnberg Model Fair. The full-size engine has two sister locos extant. No.2969 is being restored by Eurovapor at Sulgen, and No.2978 is in operating condition with SBB Historic.

## BOB

On 20th November 2015 the new 708m long Buechlitunnel between Zweilutschinen and Lütschental on the BOB's Grindelwald line was inaugurated. Work started on this CHF40m scheme in 2013. The unstable geology was very challenging; a reminder of the innumerable rock falls and slides which have dogged the old line in this area for over 120 years. The new tunnel has a single track on a 27% (1:37) grade, and is laid out for 70kph running.

## Monte Generoso

This, Canton Ticino's only rack line, remains closed and is not due to re-open until Spring 2017. Work to renew the visitor facilities at the summit of the Monte Generoso will continue throughout the coming summer. On its reopening it is hoped that occasional workings with the line's SLM H2/3 steam rack locomotive will be resumed.

## Appenzellerbahnen (AB)

AB has received the go-ahead from the BAV (Federal Transport Office) to start work on their new St Gallen cross-city line, linking the Trogenerbahn route with the line out to Appenzell and Gais. The main element of the scheme is the 700m Riethüsli tunnel that will remove the only section of rack operation on the original AB route out of the city. Preparation work had started before the formal go-ahead and tunnelling should have commenced in the spring. The new line will effectively become an interurban tramway and this is recognised by the CHF95m purchase of 12 Stadler Tango trams to operate it. The arrival of these will see the modern Stadler EMUs that now operate the Trogen line move to Tramways de Neuchâtel for service on its Boudry line. Photo on Page 18.

## BLS receives Cultural Award

In January the BLS was awarded the Swiss National prize for a cultural 'Monument' in recognition of its restoration of the preserved 'Blue Arrow' two-car electric railcar BCFe 4/6 No.736 of 1938. Even when built this was seen as a pioneer passenger vehicle with its pantograph and powered bogies - the forerunner of what we today accept as a normal two-car electric railcar set for S-Bahn and local service. *Swiss Express* readers in the UK who are still suffering the 4-wheeled, uncomfortable, diesel powered 'Pacers' built 40-years later may ignore this note!

## News from Stadler Rail

● **Glasgow Subway.** Stadler has secured a contract, in association with the Italian company Ansaldo, to upgrade the unique 4' gauge Glasgow Subway. Stadler will supply 17 new trains and their CHF133m (£92m) contract includes additional technical support and supply of spare parts. The first trains will enter service in 2020, will be 39m long, have 116 seats plus 12 folding seats, standing room for 204 people, and have a maximum speed of 58kph. The Glasgow subway is being completely modernised and converted to an automatic driverless system, with Ansaldo (now Hitachi) supplying the signalling and control systems at a cost of £108m.

● **Jungfraubahn.** The first new 3-part train set for the Jungfraubahn, Bhe 4/8 No.221 was delivered at the end of February. In the meantime BDhe No.205 (built by SLM in 1959) and a driver-trailer have been withdrawn and scrapped. Delivery of the JB's new trains takes place via Grindelwald, where a ramp, used also for the WAB for new deliveries, is available. The meter-gauge trains of the JB can be transported on the 800 mm gauge WAB using special carrier bogies.

● **RhB.** The first of the new fleet of trains for the Albula main line was delivered to the RhB's Landquart depot last December. It is undergoing proving trials during the first half of 2016 with a handover to RhB planned for July 2016. See article on P22.

## DB's Upper Rhein Line

This route between Basel - Waldshut - Schaffhausen runs for 20 km through Switzerland, with another 74 km in Germany, and



is operated throughout by DB diesel railcars. The Swiss section (Schaffhausen – Erzingen) was electrified in 2013, but until the DB section from Basel Badischer Bahnhof to Erzingen is also electrified this work has served little purpose. Letters of good intentions from the various German authorities have for some years led nowhere, so it was heralded as a breakthrough when a declaration by German and Swiss interests announced that the joint financial planning would be completed by late 2015, allowing project design to start in 2016. Since DB has neglected the route for some time, heavy modernisation work will be required resulting in the cost of electrification being around €160m with the potential for completion in 2021 at the earliest.

## Neuchâtel approves new line to La Chaux-des-Fonds

In February the voters in the Canton of Neuchâtel approved the ‘*Mobilité 2030*’ initiative, which includes several road and rail projects. The biggest of them is constructing a new, shorter, Neuchâtel - La Chaux-de-Fonds railway line through the Jura Mountains. In 2012 the self-same voters narrowly turned down a similar ‘*TransRUN*’ initiative as too expensive for the Canton. This time the politicians wisely packaged more transportation infrastructure improvements together with the aim of getting more federal funding. The new link has a budget of CHF900m the majority of which is expected to come from the Confederation. If the decision in Bern is also positive the new line could open in 2030. The current route, which involves a reversal at the Chamberlien switchback, has nice views but is long and slow and the 28-minute travel time would be halved with the direct line. Also included in the package is increasing the frequency of the local RER trains to quarter-hourly, five new stations, and a new junction at Bole-Corcelles. In Neuchâtel city it is proposed that the TN’s metre-gauge Tramway (Route 215) from Boudry to Plas Pury is extended via Université (the lakeside terminus of the funicular to the station) along the route of Bus 121 to Stade de la Maladière. This is a 12,000-seat multi-purpose sports venue completed in 2007 and the home of Neuchâtel Xamax Football Club. Another interesting part of the package is the suggested electrification of the “Watchmakers Line” (la ligne des Horlogers) for 12km across the French border to Morteau (Doubs), along with the introduction of a half-hourly service. The various French agencies have yet to decide upon this proposal. At the current terminus of the line adjacent to the border at Le Locle several famous watchmakers have factories, with many of their employees commuting daily from France usually by car. Currently SNCF runs just some six trains a day with using single-car DMUs. (See the article on Page 20).

## Grimselbahn – an update

Following the article on P27 of the March *Swiss Express* there has been more movement on this potential project than we could have imagined. A new report has made it clear that it is the now urgent need to increase and renew electricity transmission capacity, where investment has fallen behind planned needs, that is driving this once unlikely project. Swissgrid, the National Network, has evaluated power needs for 2025 and has strongly recommended that it requires a 380Kv cable connection from the Valais to Innertkirchen and the Bernese Oberland. It recommends that the connection should be laid in a tunnel under the Grimsel for

environmental and maintenance reasons. A tunnel would also allow relocation of the existing overhead lines in this scenically sensitive area. As a cable tunnel would in any case require transport access, the idea of the long-dreamed-of Grimsel rail line was also evaluated. A 22km rail line with 60% ruling grade could be built in three parts: Innertkirchen-Guttannen; Guttannen-Handeck, and Handeck-Oberwald. The overall cost of a rail and cable tunnel is estimated at CHF580m, with a stand-alone cable tunnel costing CHF490m. However, the true costs of a rail connection must include substantial improvements to the approach routes and other associated technical works, all of which have not been accounted for. Currently, some CHF6m has been allotted for detailed planning that would lead to a concession application in 2018, led by Cantons Bern and Valais along with Swissgrid. The earliest a parliamentary debate could take place would be in 2019.

## ROLLING STOCK NEWS

### ● BLS: Withdrawal of Re4/4s

No.162 was withdrawn as planned in November 2015 and scrapped along with No.163 stored since damaged in December 2014.

### ● Stadler: Buys an Ee3/3

In 1991 SwissPost purchased a new Ee3/3 No.14, for the sorting office in Luzern. In 2009 this locomotive became redundant going to the CJ for the chemical waste trains in Bonfol, then to work the gauge transfer installations Tavannes until 2015 when the CJ acquired another loco for this role. Stadler have now bought No.14 to equip it for mainline operation on interworks transfers between their factories .

### ● RhB: ‘Heidi’ again in action

G3/4 No.11 ‘*Heidi*’ was at long last approved for special train service, when in December 2015 the last authorisations were awarded enabling this dearly loved little engine to work again, all thanks to the efforts of ‘Club 1889’ at Samedan. This included a completely new welded steel boiler with superheater, new pistons and valves, and adaptation to oil-burning. ‘*Heidi*’ was scheduled to debut in early March on the Engadine line below Samedan. There is another ‘*Heidi*’ currently in the news in Switzerland. The new Swiss full feature film of Johanna Spyri’s legendary novel has been running in Swiss cinemas this spring and breaking all records. It is apparently the best version for many years.

### ● SBB: Withdrawals, etc.

Ee 6/6 II No.16813 was an unannounced withdrawal in 2015; Bm 4/4 No.18441 has gone; Ee3/3 Nos.934 554/558/559 have all been sent for scrap in Ecublens; there are no more in Basel; Ee3/3 Nos.934 553/555/556 are all at Genève, but in reserve, as is No.16515 - expect them to go soon. Three of Class 922 are now diagrammed regularly in Genève; the last Bm6/6 No.18505 (for 9 years at Brig for heavy passenger shunting) is now in Olten with SBB Historic; at 1st January only eight Em 3/3s (the 18800 series) were left: catch them if you can.

*Swiss News is compiled by Bryan Stone and includes input from, Michael Donovan, Ilkka Houtelin, s'Murmeli, Mario Gravazzi, Paul Russenberger, and others.* 