

All aboard the tram!

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THE ARRIVAL in January of the first low-floor light rail vehicle for the Valenciennes tram network marked a significant milestone in a lengthy process of planning, construction and commissioning. Now we are looking forward to the inauguration of the first route on June 16 next year.



The opening will bring to fruition a dream that dates back to 1992. As has been demonstrated elsewhere in France, we are confident that the trams will bring an immediate improvement in the quality of life in our region. The project has already started to encourage urban regeneration in line with the regional planning strategy.

With 350 000 inhabitants in 75 *communes*, the Valenciennes region is now the 12th largest urban area in France. Valenciennes itself is home to 41 000 people, and Denain to over 20 000. In 2001 these 75 *communes* were grouped into two *Communautés d'Agglomération*, Valenciennes Métropole and Porte du Hainaut.

The region has changed a great deal over the last 20 years. The built-up area has grown, with inhabitants living further and further from the town centre and from each other. However, development has not progressed at the same pace throughout the region. The Town Planning Strategy, as drawn up in 1992 and revised in December 2002, places an emphasis on restructuring the area and restoring cohesion between the urban centres and the suburban communities.

The area's industrial past has left its mark and the strategy includes the restoration of green space, with specific actions to rehabilitate industrial wasteland.

Transport and urban planning

It was also recognised that the town planning strategy must be accompanied by an improvement in public transport

provision, and the tram network being sponsored by SITURV has been an integral part of the strategy since it was adopted in May 1992.

With urban growth increasing average journey lengths, travelling times became longer, and the number of journeys needed multiplied. The number of motor vehicles in the Valenciennes area increased from 49 000 cars in 1975 to 121 155 in 1997. But even after this growth, we found that 60% of the region's residents were reliant on public transport at certain times of the day.

This increase in the use of cars caused more congestion in the town centre. As almost everywhere, cars are omnipresent, bringing noise and pollution. At the beginning of the 1990s, SITURV broached the idea of improving public transport. In June 1996 it agreed to draw up a Local Traffic Plan for the Greater Valenciennes region within the framework of the 1982 Law on Town Planning for Transport.

This process was accelerated by the Law on the Quality of Air and Rational Use of Energy (LAURE) passed on December 30 1996. All urban areas with more than 100 000 inhabitants are required to draw up a Local Traffic Plan, limiting the use of cars and encouraging the use of other modes, including public transport,

bicycles and walking. The finished plan for Valenciennes was officially approved on February 21 2001.

Driving force for change

The decision to invest in a new tram network has enabled Valenciennes to redesign its entire public transport network. The long-term plan envisages construction of a two-line H-shaped network connecting the four major economic centres: Valenciennes, Denain, Condé-sur-Escaut and St-Amand-les-Eaux.

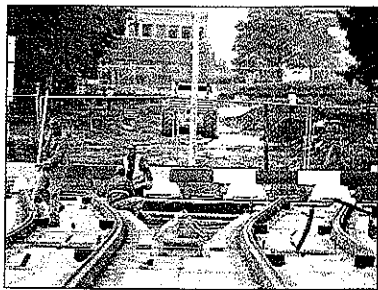
The final go-ahead for the tramway came in August 2001, when the Préfet of Nord Pas-de-Calais signed the formal Declaration of Public Utility, so that work on Phase 1 could get underway at the beginning of 2002. Preparatory works and utilities diversion occupied most of 2003, and it was not until May 2004 that civil engineering work could begin. Rapid progress at this stage led to a ceremony on September 7 to mark the start of tracklaying (RG 10.04 p663).

Civil engineering on the western and southern sections of Phase 1 is being undertaken by a consortium of Beugnet Hainaut and Colas Nord Picardie for €31.4m. Jean Lefebvre and SCREG Ramery are responsible for work in the central area valued at €33.7m. Major structures including three bridges have been contracted to Norpac and Quillery for €23m.

Track and signalling are being supplied by Vossloh under a €33.6m contract, with the 41GPU section grooved rails coming from Corus. The 750 V DC overhead electrification package worth €2.3m is the responsibility of a consortium of AMEC Spie Rail, Forclum



The first of 17 Citadis 302 low-floor trams being supplied by Alstom for Valenciennes Line 1 was officially unveiled to the town's citizens in a ceremony outside the town hall on February 25

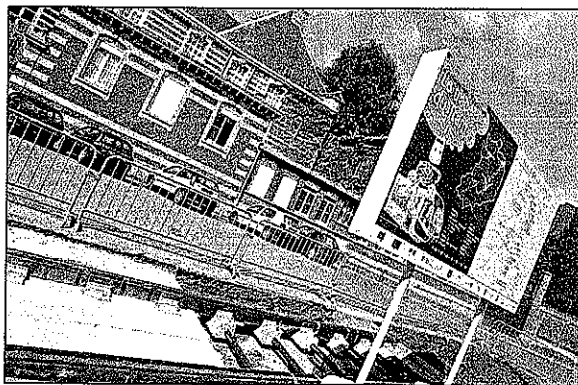


Tracklaying work is well underway in the town centre, where bus routes and car traffic have been re-routed to free up road space for segregated tram tracks wherever possible

Ingénierie and Norelec Industrie. Thanks to competitive tendering, the total cost for all these contracts came in at €10.4m under budget.

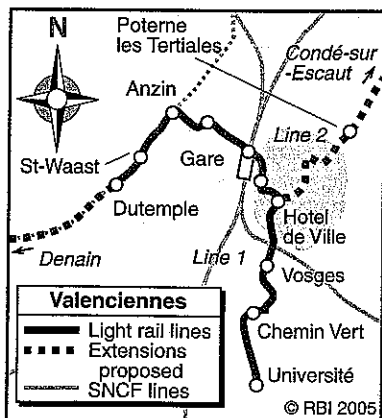
The first section of Line 1 will be 9.5 km long with 19 stops. It will start from Dutemple in the southwest of Valenciennes and run north to Anzin along the alignment of the disused Somain – Péruwelz industrial railway, which was acquired by STruV in 1999. From Anzin it turns east past the main railway station to the centre of Valenciennes.

The line will then continue south through Marly, Aulnoy, Famars and Hainaut-Cambresis to terminate at the Université de Mont Houry campus at Aulnoy. The main depot and workshops



are located on the site of the former mineral railway yard at Saint-Waast, which will also house the operations control centre, electrical distribution feeder and a bus stabling area.

Total cost of the first phase is put at €243m at 2001 prices, of which €41.5m is coming from the French Ministry of



Public Works & Transport, under a grant agreement signed on November 27 2002. The European Investment Bank is contributing €110.5m through loans to STruV, and the rest will come from a consortium of banks. Operating costs will be covered by an increase in the local *versement de transport* workplace tax from 1% to 1.75%.

Line 1 will be worked by a fleet of 17 Citadis 302 all-low-floor LRVs ordered from Alstom at a cost of €48.5m; the contract includes options for up to 11 more vehicles to work various extensions. To maximise local content, the cars are being assembled at Petit-Forêt by Bombardier's former ANF Industrie plant, which is also building the bodysells and bogies. The 33 m long, 2 400 mm wide cars each carry 48 seated and 147 standing passengers. The bidirectional cars have four double and two single doorways on each side, and the floor height at the doorways is just 280 mm above rail level.

Dutemple – Université services on Line

1 will run every 12 min off-peak and every 8 min at peak times, overlaid with a shuttle between Anzin and Valenciennes halving the headway in the central area. End-to-end journey time is estimated at 25 min, requiring a commercial speed of 20 to 25 km/h including stops.

An expanding network

The opening of Line 1 in June 2006 will not be the end of the story. Construction work is already underway on the €49m second phase, which has been accelerated by a year to give a target completion date of 2007.

This phase covers an 8.5 km extension of Line 1 running southwest from Dutemple to Denain, designated Line 1bis. The route uses a further section of the old industrial railway alignment.

There will be seven stations to serve the communities of Denain, Oisy, Hérin and La Sentinelle. There will also be a major park-and-ride facility close to the A23 Lille – Valenciennes motorway.

The new terminus at rue Villars in Denain is being designed as a major transport hub, in conjunction with a retail and office development, L'Espace Villars. The second most important hub on the tram network, it will have 4 m wide platforms offering convenient interchange between tram and bus services.

With trams serving Valenciennes and Denain by 2007, STruV will then turn its



attention to extending the network to the third of the four towns in the region, Condé-sur-Escaut. This 12 km branch will diverge from Line 1 at Anzin and run north through Poterne and Les Tertiales. Line 2 trams from Condé will continue over the Line 1 tracks to reach the centre of Valenciennes.

St-Amand-les-Eaux will benefit from an improved TER service on SNCF's Lille – Valenciennes route. To accommodate the anticipated traffic, the station has been rebuilt with park-and-ride facilities, providing spaces for 200 cars and 75 bicycles.

Restructuring the network

To ensure close co-ordination between tram and bus services, STruV has contracted the operation of tram services to the existing bus operator, a Transdev subsidiary, SEMURVAL currently runs 18 urban and 14 regional bus routes, operating more than 8.6 million bus-km each year.

The opening of the tram route will be marked by a profound change to the entire public transport network serving the Valenciennes area. The first phase of Line 1 will serve five major interchanges, of which four will have park-and-ride facilities, where motorists will be able to leave their vehicle and continue their journey by tram without having to worry about traffic, pollution or parking.

Introduction of the tram to the town centre has already required reorganisation of certain bus routes to free up road space. To ensure that the two modes compliment each other, some bus routes will be altered, and others extended or modified to improve connections with the trams. The stations at Université, Anzin and Place du Hainault in the town centre are being designed as specific bus-tram interchanges.

Cyclists and motorcyclists will also be able to use the car parks, and bicycles will be permitted on some trams outside peak hours. We expect the restructured network to improve the quality of public transport right across the region, in terms of both speed and availability to all.