BUS NETWORK TOURS

A relief of loads on the north-south axis as well as a strengthening of secondary axes decreases the number of transfers in the network.

In 2007 the contract with the operator of the bus lines in greater Tours will run out and has to be tendered anew. In preparation of this tender the SITCAT (the local transport authority) has carried out a technical, economic and legal analysis of the existing bus network and the corresponding contract. Within the framework of this study TTK was responsible for the technical analysis of the bus network.

The current bus network in Tours is characterised by a strong bundling of lines on a north-south axis in the agglomerative centre. a separate bus lane has been created on this axis. However, the analysis showed that the available bus services are concentrated too much on this north-south axis. Other areas in particular along the east-west corridor were neglected. During peak travel times the extreme bundling also had the separate bus lines reach their capacity limits. A further weakness of the network was the individual servicing of important institutions not situated on the north-south axis (railway stations, hospitals, university) by separate bus lines.

Within the analysis the routes for bus lines were determined which would improve the links (secondary axes) between areas not sufficiently serviced so far and the city centre. This restructuring of the bus network aimed at:

- a strengthening of the secondary axes
- a better link to important institutions
- the introduction of synchronized timetables

Demand effects of various new networks were determined with the help of VISUM. This showed a high demand for the servicing of the secondary axes not accommodated by the current network structure. It moreover showed that the relief of strain on the north-south axis and the strengthening of the secondary axes would reduce the number of transfers in the network.

The resulting restructuring measures on the bus network were drawn up in two steps, short term measures for the interval 2008-2010 and mid-term measures linked to the building of a first tram line in Tours for 2012. For the latter case the expected increase in passenger numbers and the increase in demand for public transport by tram were determined separately.

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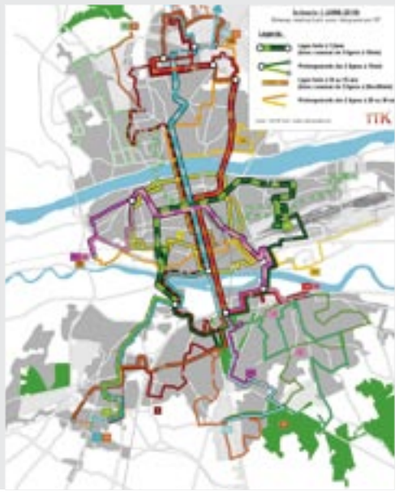
● Public Transport Demand Patterns ● Route and Frequency Diagramme



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10 YEARS OF TTK

THE ANNIVERSARY SHOWS TTK IN NEW DESIGN AND WITH NEW INFORMATION

10 years of TTK are a good opportunity to say thanks: to our customers, to our business partners, to our employees as well as to all friends of the house. Moreover, the anniversary induced us to present a new Corporate Design and fresh information.

To tune into the idiosyncrasies of individual markets even better in future we will produce separate issues in German, English and French with partly differing articles. Among our standard projects range tramways, light, underground and heavy railways as well as bus solutions. Even the design of mountain cableways has been studied by TTK.

We will continue to exchange experiences gained in projects in Germany, France and Great Britain and to improve our strategies for the optimisation of public transport concepts.

Have a good read!

LONDON CROSS RIVER TRAM

An outstanding tramway project is to link London's north to the southern part of the metropolitan area. 6000 passengers per direction during peak hours is the ambitious target.

Cross River Tram at present seems to be one of the most ambitious tramway projects in Europe. The river Thames lends its name and the planned route runs approx. 16 km right through the centre of London.

A 2-MINUTE-INTERVAL WITH VEHICLES OF 45 M LENGTH IS ENVISAGED.

The southern suburbs Peckham and Brixton are to be linked northwards to the city. In particular Peckham would benefit from this project as at present it does not have any good railway connection to London's city centre and is neither linked to the tube network. The tramway is to bring an urbanistic improvement to structurally weak Peckham. Brixton would mainly benefit from a reduced crowding on tube and bus lines.

In the central area south of the Thames the route is to link to the big junctions of Elephant&Castle and Waterloo Station. Acceptable solutions to integrate the tramway in current surroundings prove to be a major technical challenge. Many interests clash, there is hardly any room and to acquire land for the tram tracks is utopically expensive. Therefore the Cross River Tram for a large part will run on and along existing roads. Prioritisation will play a decisive role here.

After crossing Waterloo Bridge the track runs directly northwards via Aldwych, the Strand, Holborn and Westminster to Euston Station. It is this business centre of London where most potential passengers are bound to.

North of Euston the track splits to Camden Town and King's Cross / St. Pancras stations.

ASSISTANCE IN OPERATIONAL QUESTIONS AND TECHNICAL ASPECTS CONCERNING VEHICLES

In the peak hour more than 6000 passenger are to be transported per direction. A 2-minute-interval with vehicles of 45 m length is envisaged. Even these base data show that comparable projects are hard to find.

The project is currently in the stage of preparation of the Transport and Works Act (TWA) order which will most probably last until the middle of 2009 also due to the vast number of public hearings.

Overall project leader is Steer Davies Gleaves (SDG). Many consultancies in the field of environment, urban and spatial planning are part of the team. In the project TTK is mainly concerned with all operational questions. Moreover, TTK supplies expertise for vehicle technology and assists Mott McDonald in their infrastructural design efforts. TTK alternates three people on the spot in London.

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For more information see also: www.crossrivertram.org

● Draft Cross River Team

LATEST NEWS

September 2006 brought the start of Urban Track, a 4-year European research project within the 6th framework programme. Aim of this ‚Integrated Project' (IP) is the development of innovative solutions for as well as a harmonisation of the maintenance of urban rail infrastructure.

The integrated project is split into five subprojects (SP 1-5) and brings together about 30 international partners. Within the IP TTK leads SP 2 ‚Cost effective track maintenance, renewal and refurbishment methods' as well as SP 4 ‚Life Cycle Cost (LCC) calculation'. As a leader of these subprojects TTK is also a member of the Urban Track Steering Committee.

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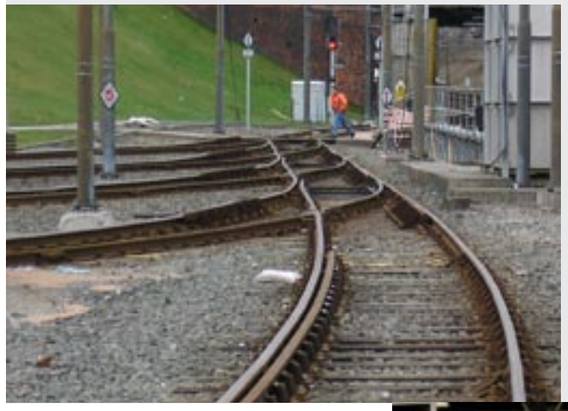
The project is open for the assistance of further network operators in all of Europe. UITP will manage the group of interested users. Further information is available at TTK.



● Depot Manchester

● Depot Saarbahn

CONCEPTS AND DESIGN OF DEPOTS

Complex framework conditions for depot projects demand highly specific conceptual design and execution.

Depot design at TTK comprises the entire conceptual design of the depot including infrastructure design, maintenance procedures and equipment strategies.

At present the ‚Betriebshof Ost' in Karlsruhe (depot east) as yet another TTK project is realised. The wide range of experiences gained in this project benefit current conceptual phases in Saarbrücken, London and Manchester.

Last year TTK carried out a study for the expansion and restructuring of the existing site. Results showed that the investment necessary for the reconstruction and reorganisation of the present site do not allow optimal operating procedures. For this reason at the beginning of 2006 an alternative site on the grounds of Brebach station was analysed showing far more beneficial conditions for operation while requiring the same investment.

TTK currently assists the design team in the Cross River Tram project. At present a potential site is discussed in combination with the search for the optimal conceptual design of a depot for the planned tramway.

THE WIDE RANGE OF EXPERIENCES GAINED IN THESE PROJECTS CURRENTLY BENEFIT PLANNING PROCESSES IN GERMANY AND ABROAD.

In the course of an expansion of the tram network in Manchester the existing depot is to be extended and reconstructed with the aim to be able to integrate necessary additional vehicles as cost-efficiently as possible into the existing and later into an extended depot. TTK here plays a consulting role.

TTK's current projects show that the framework conditions for each project always also require an individual conceptual design and execution for the depot in question. Existing guidelines and recommendations very often are of no further use in particular as rather differing maintenance philosophies are applied in any country which is what makes it even the more exiting and interesting for TTK.

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