



# INFORM

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## 20 YEARS TTK

### MOVING FORWARD WITH YOU

This year TTK celebrates its 20th anniversary. We are very proud of this accomplishment, but first we would like to express our cordial thanks to our customers for many interesting projects entrusted, to our partners for their successful collaboration and to our team for its commitment and customer focus. We remain resolutely focused on the future and look forward to new exciting projects.

For instance in Heidelberg, the leading personalities of the region have inaugurated the construction site for the extension of the tram network.

Our department dedicated to infrastructure planning will take in charge for the first time both supervision and monitoring of construction works, as for the Schönbuchbahn project.

The City of Tours continues its cooperation with TTK, assigning the planning of its bus/tram network for 2025. Grenoble relies on the expertise of TTK to define its

strategic vision of mobility for 2030 to achieve its ambitious objectives over the next decade.

Finally we would like to mention a successful European mobility project, of which TTK contributed in preliminary studies in 2006: the completion of the Strasbourg tramway extension to Kehl (Germany) which will ensure a better connection between the Rhine Port Area (a new district of Strasbourg) and the German city.

We are also pleased to welcome Mr. Christian Höglmeier, as a new member of senior management. Thanks to his current position as a Technical Director of AVG and VBK, he will support and strengthen the connection between our company and the Karlsruhe transport companies.

This 20th anniversary shows a great step forward in TTK history, with the renewal and redesign of our website ([www.ttk.de](http://www.ttk.de))

Enjoy reading

## MOBILITY NETWORK HEIDELBERG

### Another Milestone: Start of construction work on the Bahnstadt tramline

Within the framework of the Mobility Network Heidelberg, expansion and comprehensive upgrading of the tramway infrastructure will be completed by 2019. The construction of a new tram line in the new district "Bahnstadt" is only a first step of a larger project which ambition is to gain additional 10,000 public transport users per day.

On 15 July 2016 the Minister of Transport in Baden-Württemberg, Winfried Hermann, Mayor Dr. Eckart Würzner, the technical director of RNV, Martin Beek (regional public transport operator) and Michael Jäger, managing director of HSB (local public transport operator) launched the construction of the new line.

About 12,000 people living or working in the new district will have direct access to the tram network in the city, while inhabitants of other districts will benefit from faster tram connections to new shops, cultural and leisure facilities.



The new line running through "Grüne Meile" and Czernyring is harmoniously integrated in the district green areas thanks to its lawn track. The new stations Eppelheimer Terrasse, Gadamerplatz and Hauptbahnhof Süd are barrier-free accessible and equipped with modern passenger information systems.

The construction of this new 2.2 km section is planned over a 2 years period and will be connected to the existing infrastructure in Eppelheimer Straße Czernybrücke and Montpelllierbrücke.

Since 2011 TTK supports the project in all phases from planning to construction.

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## TOURS CONFIRMS ITS CONFIDENCE IN TTK BY ASSIGNING TWO FURTHER STUDIES

TTK has been working for 10 years as a technical consultant for the Tours urban conglomeration (Tours Plus). Together with other engineering companies TTK contributed to the success of the new bus / tram network implemented in 2014.

Considering these previous assignments and being confident with TTK expertise, Tours Plus commissioned TTK with two further studies. Thus our teams are simultaneously working on a network restructuring proposal for the new award of operation contracts in 2019 and on "A preliminary study for the development of a Public Transport System using a Reserved Track (in French TCSP) of Tours".

Based on an initial situation analysis, comprising relevant topics (history of network development, evolution of origin-destination customer data, future urban projects) and in consultation with all the mayors of the conurbation,

the future network in 2019 is being designed, together with the responsible departments of the conurbation. The aim is to strengthen the aspects which led to the success of the network in 2014 and to complete them by adjustments where an unsatisfied demand remains and / or new needs arise.

The preliminary study for the development of the TCSP network is led by a consortium gathering TTK with Richez\_Associés as a responsible for the transport system insertion, Transitec for the traffic expertise and PTV-France for the transport simulations. The 8 months planned study comprise a first phase of assessment of needs, followed by an analysis of constraints and opportunities, a development of network scenarios for 2025 and their possible extensions by 2050 as well as a further design and development of the most pertinent proposed solutions. The final chosen scenario will go further in details, focusing on its urban integration and on the planning of execution.

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## THE CITY OF GRENOBLE IS SHAPING ITS FUTURE TRANSPORTATION NETWORK BASED ON TTK'S EXPERTISE

Following the opening of its fifth tramway line back in July 2015, in line with the pioneering approach developed since the 90's in Grenoble (one of the first city to have a tramway revival in 1980's, full wheelchair accessibility, dedicated bus lane on emergency lanes on a highway, "quite streets" concept with 30kph global speed limit ...), the city now intends to define its strategic mobility vision for the next decade.

The department of the city council in charge of public transport (SMTC) and the conurbation (Grenoble Alpes Métropole) appointed TTK to assist them with this ambition through several complementary studies.

Firstly, TTK provides assistance for the next 2030 Public Transport Strategic Plan. This requires a new approach compared to previous strategies, as this document will not only emphasize on new infrastructure needs, but also on low-keys improvements and potential quick wins for the existing public transport network. TTK identified several measures which could improve not only the public transport network financial and operational performance, but also its attractiveness to users. One of them is the idea of "network meshing" for the tramway lines: instead of having one dedicated line on an infrastructure, the goal is to operate several lines with different patterns to offer more direct destinations and adapt the capacity to the demand with several lines on the most charged sections in the city centre.

Meanwhile, TTK is also developing a study on the potential for a new lightrail line in the southern part of the city. While this solution is particularly suitable in terms of expected performance (travel times, reliability, ...), TTK helped the city highlighting main technical challenges to be faced for such a projet. Notably, the

high level risk area of the industrial and chemical estate very close to the railway track makes it much more complicated to consider a project there.

Finally, TTK continues to spread its expertise on active modes with a French-German approach, through a third study dealing with Grenoble cycle network strategic plan. Indeed, Grenoble has an ambitious target to triple bike modal share by 2020. TTK audited the 550km cycling infrastructure, highlighting safety, confort and directness issues in the existing network. This GIS Database will now play the role of a valuable tool for short term planning interventions, to be combined with bike parking, bike services and mobility management measures.

Although the three studies were appointed separately to TTK through three independant tendering opportunities, TTK provides a global and valuable expertise to Grenoble city council, as the city is preparing the revision of its SUMP and its next urban planning plan.

Those 3 studies highlight TTK expertise and emphasise the daily commitment and seriousness of its consultants who show both human and technical qualities to help the city of Grenoble achieving their planned goals.

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## LATEST NEWS

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### +++ SCHÖNBUCHBAHN: SUPERVISION OF CONSTRUCTION +++

Green light for the start of the construction work of Böblingen depot in November 2016, after the site approval as part of the legal planning procedure and the agreement on the financial means. The Schönbuchbahn engineering community will start the supervision of the construction work under TTK's leadership, which requires a close and essential interaction between the planning and monitoring of the construction site with the different trades and construction companies. The trusting relationship developed over the years between TTK, the customer, the project management committee and the engineering community is certainly a key factor to bring to success the supervision of the construction contractors and meet the challenges together.



### +++ CATTLE ANIMALS AS MAINTAINERS OF OLD REGIONAL RAILWAYTRACKS? +++

TTK contributed to the 5th IENE (Infra Eco Network Europe) International Conference on Ecology and Transportation in Lyon from 30th August to 2nd September 2016 with the topic "Integrating Infrastructure with living landscapes". TTK shared its experience with old regional railway tracks in France and the necessity to manage vegetation regularly on closed tracks to avoid supplementary costs in case of a reopening. TTK presented innovative methods experimented by Ecozone, using weeding animal (sheep, goats, cows...) instead of chemical or mechanical means, thus offering an interesting, cheaper and sustainable alternative to maintain tracks.



### +++ NEW EXCITING PROJECTS +++

+++ This autumn RATP commissioned TTK with another two expertises in operations and services, for the lines 1 and 2 which are the busiest lines of Paris Metro network.

+++ Optimizing Operations with OpenTrack: Green light for the second stage of the "Kombilösung" in Karlsruhe with the construction of the automobile tunnel and the creation of a new on-ground tramway track in the Kriegsstrasse. In this context TTK undertakes two studies focusing on optimising the network and the operations using OpenTrack (a software for modeling and simulation in operations of railway networks). In France, by the end of 2016 several projects such as the studies for the South and West Trams express lines in Ile de France and the tramway and BRT in Nantes, will be completed with the successful application of OpenTrack.

+++ Electrical BRT with a charging system: Thanks to our experience from the projects in the French cities Amiens and Nantes, we are now able to provide our clients with a better consulting service in innovative public transport systems.

+++ TTK assists the department of Eure (west from Paris) in the planning of the new railway line Paris-Normandy, using an integrated approach which takes into account the particularities of urban development and an optimised customer service.

+++ With the construction of a new city district along the Rhine river and the former docklands, Strasbourg is realising one of its largest urban development projects. During the preliminary studies dealing with the extension of the tramway network in 2006, TTK pointed out that the extent of urban development projects, which were in planning by that time, was not sufficient enough to justify the creation of a tramway line. Since then, the planned urban projects have expanded significantly, allowing the two cities Kehl (Germany) and Strasbourg (France) to grow hand in hand and to connect through the tramway project. TTK is proud to have contributed to this exemplary European project.

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