



**Strukton**

## **The power of PPP in light rail**

About the increasing need for light rail systems in urban areas, the benefits of public-private partnerships and how Strukton combines its strengths in this market.



Strukton advocates Public-Private Partnerships (PPP) in light rail as a successful approach to realise public transport service in a more efficient and effective way. Strukton is an experienced manager of PPP projects and a full-service provider of rail systems throughout Europe. The company has formed a consortium called TramTeam which, together with public authorities, develops integrated light rail solutions for urban transport problems.

Politicians and public authorities are faced with the issue of how to keep their urban areas liveable and accessible. What has already happened to metropolises, is now threatening to occur in medium-sized cities as well: traffic congestion and the infringement of environmental standards. Light rail connections can assist in reversing this trend. After all, they cause less pollution and occupy less space than road traffic. However, it usually takes a long time before such connections are operational.

It is not a simple task to equip a city with an efficient light rail system. The development of a light rail system is usually complex and requires a careful organisation of expertise and means. Local politicians often see themselves confronted with established interests, which are often conflicting. The classic financing structure and legislative frameworks governing the construction, management and operation of urban public transport do not make things any easier. And finally, execution itself is also a complex technical and organisational process.

While Public-Private Partnerships in the light rail sector are still very much a novelty in some countries, many European countries have long proven the advantages of PPP in this sector. Over 80 PPP light rail concessions in various stages of development were registered throughout Europe in 2010. The UK, Germany, Portugal and recently Belgium have seen a sharp increase in the number of PPP projects.

## The benefits of Public-Private Partnerships in light rail

PPP appears in many different shapes and forms. An innovative project entails different risks when compared to proven technology. A PPP contract is often referred to as a DBFM project, which refers to Design, Build, Finance and Maintain. The O for Operate is sometimes added. In other cases, however, the authorities and a private consortium form an alliance. In all cases, an integrated approach is adopted for a partnership lasting around 20 years, in which the authority and private party each bear their own responsibilities, while doing what they are good at. The former implements policy and monitors quality, while the latter designs, builds, maintains, finances and operates. The risks are borne proportionately, while aspirations are shared. The aim is to resolve an urgent traffic problem as quickly as possible by means of sustainable solutions.





## Traditional approach

The authorities divide the total task: planning, design, construction, management, maintenance and operation. They conclude contracts with engineering firms, contractors, infrastructure managers and transport companies for each consecutive phase.

The government authority is responsible for the coordination and bears the inherent risks.

The government authority has to invest, while government budgeting structures do not make matters any easier. It can take quite some time to get such projects up and running.

Possible consequences: fragmentation, technical problems and running over budget and schedule.

## > Public-Private Partnership

> The authorities define their wishes and requirements clearly and functionally. The private party develops an integrated technical and commercially viable solution allowing for the entire life cycle.

> The private party bears the responsibility for the interfaces between technical systems and the various project phases of the development process.

> The private partners provide for the financing. The banks will conscientiously see to it that the best solution will be achieved, because reliable revenue from the project will be the only way for them to make sure that the financing will be repaid.

> The probability of the schedule and budget being exceeded is reduced because such events would increase the pressure on the project revenue. Transport and infrastructure will be optimally aligned, as any disruption would have a negative impact on the concession's profitability.

## Examples

Light rail projects for which Strukton can design, build, finance, maintain and operate complete light rail systems.



 TramTeam

### Sweden. Tvärbana City

#### From museum line to modern light rail connection

Stockholm's local transport company (SL) announced the tender of the Djurgårdslinjen DBFMO concession in August 2007. SL services 650,000 bus, train and metro passengers daily in the Stockholm region. The tender involves an existing line in Stockholm's city centre which is currently used for the operation of museum trams as a tourist attraction. The aim is to operate this line on a commercial basis as well, using modern light rail vehicles. The project was reconfigured in June 2008 and renamed Tvärbana City. The scope was extended considerably.

### Belgium. Spartacus

#### Express tram between university grounds of Diepenbeek and Maastricht

The Flemish public transport company De Lijn launched the Spartacus plan to develop a high-quality regional public transport network in Limburg and realise a regional network of fast connections between both cities. The construction of a cross-border express tram line between the university grounds of the Belgian city of Diepenbeek and the Dutch city of Maastricht is an important part of the project. The express tram line is of strategic importance for the further development of the Transnational University Limburg, the smooth running of urban traffic between the Belgian and Dutch regions of Limburg and the reinforcement of the tourist and economic attraction of the cities of Hasselt and Maastricht.



 TramTeam

### Netherlands. RegioTram Groningen

The RegioTram is the idea of the Groningen-Assen Region, the Groningen provincial authorities and the Groningen city government to improve the accessibility of the region and the city in a sustainable way. The first phase focuses on the tram in the city of Groningen and the railway connection in the region. More trains will run in the region. New stations will be built and new railway lines will connect Groningen with Veendam and Heerenveen. The city of Groningen will have two tram lines: line 1, from the Main Station to the Zernike University Centre, and line 2, along the University Medical Center Groningen to Kardinges.

More information about these projects is available at [www.struktonpps.com](http://www.struktonpps.com)

## The strength of Strukton

Two Strukton companies combine their forces for PPP solutions in light rail:  
Strukton Integrale Projecten and Strukton Rail.

Strukton Rail is a full-service provider and system integrator for rail systems in Europe. The company has branches in Norway, Sweden, Germany, the Netherlands, Belgium and Italy. All of the organisation's efforts are aimed at the development, construction, renewal and maintenance of rail infrastructures and electrical systems in rolling stock. The aim is to make public transport more attractive.

Strukton Integrale Projecten acts as a manager and investor in the growing market of PPP in the Netherlands and Europe. The organisation offers innovative and integrated solutions in the fields of government accommodation, infrastructure, (light) rail, care and education, based on the total life cycle of a project.

Both companies are part of Strukton, a full-service provider of infrastructure and accommodation solutions.



Strukton

Westkanaaldijk 2, 3542 DA Utrecht, the Netherlands

P.O. box 1025, 3600 BA Maarssen, the Netherlands

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