Funding and financing solutions for urban rail systems

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UNIFE is the European Rail Industry Association

More than 100 suppliers of rolling stock, infrastructure and signalling equipment, and national rail industry associations from 14 European countries

Over 400 000 jobs in Europe
UNIFE members’ contribution to urban mobility

- Metro
- Tram
- Light rail
- Signalling systems (CBTC)
- Urban infrastructure
Why to invest in urban rail?
Transport = 24% of fuel-burn CO2 globally

Rail = 3.5% of global transport CO2 emissions while transporting 8% of world passenger and freight-tonne km

Paris Climate Agreement – an opportunity to design more sustainable transport policies with rail as their backbone
Over 70% of the EU population live in cities

Over 60% of Europeans live in urban areas of over 10 000

Cities account for 85% of the EU’s GDP
Congestion costs nearly EUR 100bn or 1% of the EU’s GDP annually.
How?

Mobility

Congestion

Pollution
Passenger per hour in an urban environment

50 000
10 000
2170

That’s 5x more than buses and 23x more than cars
Passenger per hour

1 train (8 carriages) = 15 buses = 250 to 1000 cars
Cities – in the best position to find the right responses
EU financial support mechanisms
Funding of urban nodes within the Connecting Europe Facility (CEF)

- 88 urban nodes
- Ensuring seamless connections between TEN-T and regional and local traffic

Examples:

Support for “Grand Paris Express”, Birmingham International Station, ERTMS deployment on Madrid and Barcelona commuter lines, planning of a regional rail project (RTW) in Frankfurt am Main etc.
European Structural and Investment Funds (ESI Funds)

- In 2007-2013: EUR 7.9bn spent on urban mobility
- For 2014-2020: a minimum of EUR 12bn to be spent
- 24 EU member states are benefiting, including all 15 cohesion countries

Examples:

Bucharest metro line extension; 2nd metro line, construction of several tram lines with the rolling stock purchase in Warsaw etc.
JASPERS assistance to support projects

- JASPERS helps cities and regions to absorb Structural Funds
- Assistance is free of charge for local authorities and promoters
- May cover project preparation, independent quality reviews of projects, capacity-building, and the implementation of the projects
EIB loans and guarantees

- Construction and extension/rehabilitation of public transport networks such as metro and tramway lines
- Acquisition of rolling stock
- Development of intelligent traffic management and information systems to improve public transport, such as electronic ticketing, traffic management and communication systems

Examples:

Acquisition of trams in Krakow and Silesia; Crossrail and upgrade of Tube stations in London; upgrading of metro in Lille Métropole, Bucharest metro etc.
ELENA facility to support investments in energy efficiency and urban transport

- To improve the chances that cities’ plans will be able to attract external finance

- Grants can be used for structuring programmes, business plans and additionally needed energy audits, preparing tendering procedures and contracts, and paying for project implementation units

- EU contribution can cover up to 90% of eligible costs

Example:

Introducing tramway networks in the Region of Skåne (Malmö, Lund and Helsingborg)
The European Fund for Strategic Investments (EFSI)

- Created to mobilise private investment in key areas such as infrastructure, research and innovation, education, renewable energy and energy efficiency as well as risk finance for SMEs.

- Extended to the end of 2020, with the investment target increased from EUR 315bn to at least EUR 500bn.

- In the post-2020 period, the Commission proposes to replace EFSI with InvestEU – a new, fully integrated investment fund with EUR 15.2bn contribution from the EU budget and with expected EUR 650bn additional investment.

Source: EIB Group figures as of 12/04/2018
The European Fund for Strategic Investments (EFSI)

- Cities can partner and group their projects to be more attractive in terms of scale
- European Investment Advisory Hub
- European Investment Project Portal

Example:

Low-floor trams and tramway infrastructure (Riga, Latvia, with €75 million EFSI contribution, only part of which is for trams)
Cleaner Transport Facility

- The facility targets transport operating on alternative fuels that have lower greenhouse gas emissions or enhanced environmental performance.

- Alternative fuels include: electricity, hydrogen, biofuels, and natural gas.

- Urban rail projects eligible.
Rail Manufacturers – active partners in PPPs
Public-Private Partnerships (PPP) have already proven to be successful for the completion of many rail projects, (particularly in the fields of urban mobility, rail connections to airports etc.) with the participation of European rail manufacturers.

Just a few examples:

- Milan Metro Line 5 + extension
- Reims LRT
- Nottingham LRT L2
Characteristics of a PPP

- In a **traditional procurement model**, capital and operating costs are paid for by the public sector, who takes the risk of cost overruns and late delivery.

- In a **PPP**, the public sector only pays over the long term as the services of the new urban rail system are being delivered.
  - The private sector funds itself by using a large portion of debt in addition to shareholder equity. Accordingly, the returns on their equity will depend on the quality of the service.

- **Industrial partner** plays a key role in innovation.

- The financial strength of the industrial partner is equally crucial, because this will determine the ability to innovate, capacity to manage risks and to rectify issues during the project lifetime and absorb risks (in the long term).
Strengths of a PPP model

- PPP ensures the costs and accelerates the construction works
- PPP maximizes the use of the technical and financial capacities of the private sector
- The risks are assigned to whom is most available to manage
- PPP allows a capped budget on a long term basis
- PPP imposes to the public partner to anticipate its long term needs and creates valuable assets
- The quality of service is maintained for the duration of the contract as well as the technological evolution of the project
- The private partner is paid according to the performance of the service
- Anticipate the evolutions of technology and services and their financing
A PPP project for an urban rail network implies a single long-term contract between the public partner and a private special purpose company. There can be different kinds of contracts:

- For the design and construction of all / a part of the system
- For the financing of all / a part of the construction by the private sector
- For the operation and / or maintenance of the system

**Nature of the contract**

These contracts have to be:

- with long-term availability payments which are subject to performance deductions from the client
- or traffic revenues (not recommended)

These are to be mainly used for:

- Operation, maintenance and renewal costs
- Reimbursement of the SPC debt and payment of interests
- Equity remuneration
Tendering and budget

- **Tendering authority must be adequately resourced, because:**
  - Procurement for large scale infrastructure projects is always challenging
  - Within PPPs, the procurement process becomes even more complex, time consuming and resource-intensive (not only for the bidders!)
  - Tending entities’ own resources should be complemented by external consulting companies that have the knowledge of the procurement mode pursued and are close to the industrial sector and region (technical, legal, financial)

- **Adequate budgetary resources should be secured and allocated to the project in order to:**
  - Support project development and the tendering process
  - Financial backing during the implementation phase of the project (through grants) and the operational phase of the project (through availability payments or certain minimum revenue guarantees)
Aspects to be considered before choosing a PPP procurement tool (1)

- **PPP scheme does not change project into a profitable one** (PPPs are most relevant for achieving good maintenance – if the private partner is not delivering, it is not being paid)

- **PPP is not a total transfer of the risks to the private partner** (technical, financial, legal). Private sector can only take the risks that it is capable of managing

- **PPP bears high preparation/bidding costs** preventing some actors to compete

- **PPPs are structures tailored for long term** and not much flexible once signed: projects must be duly studied in advance and are often renegotiated
Selection process for a PPP can be long and expensive for all if it is badly driven

The private sector bears financing costs more expensive than the public sector

Public & private partners need the support of experimented PPP teams

Regarding the **costs of the project:**
  - Is there a Public Sector Comparator – a tool used by the government in determining the proper service provided for a public sector project?
  - Is there a PPP Unit in the national administration?
The importance of sustainable urban mobility planning: any PPP project must be integrated into the local economic network and the global transport offer (urbanisation, multimodality)

There must be clear need for the project and services provided

It is very important to have an existing and precise legal framework, because:

- Specific risk sharing due to the high level of the industrial matters and content
- Any rail PPP includes legal aspects on safety, such as transport of passengers
Role of the public sector

- Public sector has to define the private sector objectives during construction period but also during operation period – there needs to be a strong supervision regarding the availability of the service

- A decision is needed whether to include or not operation within the PPP scope

- A decision is needed whether to include rolling stock purchase within the PPP scope (if the system taken as a whole, then rolling stock has to be included)

- Rolling stock purchase should not be separated from rolling stock maintenance
Key factors for success

- Realistic assessment of the investment cost and of the passenger traffic/revenue at the feasibility stage

- Sustained political and budgetary support of the project

- Well-balanced risk sharing between the conceding authority and the concessionaire, with a basic rule that each risk must be allocated to the party which can manage it the best

- Strong, committed and experienced international and local partners for construction, operation and financing
Dialogue with potential partners

In order to attract real interest, the project should be well defined and developed.

However, pre-tender discussions with suppliers, service providers, contractors as well as funders are helpful to all parties as these will be able to bring real-life experience as well as sectoral and current market knowledge (e.g. early discussions on technical options due to recent innovations etc.)

This can be done through market sounding:
- The main objective is to test the private sector’s ability to assume risks that are to be transferred.
- Not the same as public consultation, but both should be carried out as early as possible in the project cycle.
- Market sounding would provide inputs and requirements from the potential partners as a group.
Close-up look at Reims tramway PPP

- A tram manufacturer, which holds shares in MARS – the company that operates the Reims tramway under a PPP deal –, supplied a turnkey solution in May 2011 covering the design and production of the tramway’s rolling stock, infrastructure and electromechanical systems (tracks, signalling, electricity supply, catenary power and ticketing).

- The Reims tramway transports some 42500 passengers a day, 40% more than the saturated bus route it replaced.

- One year after the start of its commercial service, IFOP survey revealed that 74% of the city’s inhabitants were satisfied.

- The tramway was thought to be environmentally-friendly (91%), comfortable (85%), modern (77%) and more practical than other modes of transport (76%) by the residents of Reims.
Way forward
Post-2020 Multiannual Financial Framework

- The Commission published its proposal on 2 May 2018
- Joint Position of 6 European Rail Associations
- Need for sustained grants support
- More investments at urban level needed
Mobilising private investment

- Close cooperation with the European Investment Bank and national promotional banks
UNIFE Expert Group on Investment and Project Financing

- Bringing companies’ expertise
- Direct dialogue with the decision-makers at the EU level
- Voicing the position at the EU and international level
Thank you!

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