



## **Smart and Sustainable Strategies**

**Advisory services**

**CAPABILITY STATEMENT**

**2022**

## 1 Sector challenges

Smart and Sustainable Strategies encompass all of the most innovative and socio-economic changes and challenges of modern integrated and multimodal and intermodal transport systems. The constant interaction of people's communications and internet of things, the multiple possibilities of virtual and real trips are gradually establishing and requiring the development of multimodal infrastructure networks and services. Customers are becoming active players in the implementation, operation, and performance of these intertwined systems.

Rail, Road, Aviation and Waterways links interconnect at stations and terminals in a way that at least two modes are always present at each node. The density of the globalising multimodal network maximises at urban and metropolitan nodes where all modes interconnect to each other. In urban and metropolitan areas, multimodality will be the key concept not just to offer a good integrated mobility system, but to solve several of the key challenges of urban life in the planned scenarios of population ageing and decline of the welfare economies. This requires developing urban development and regeneration projects considering the likely travel behaviour of residents and city users, their economic, social and physical capacity to access and use private and public infrastructure and services.

Mobile communications and vehicle innovation technologies are nowadays further empowering the capacity and benefits of multimodality. Real time information systems allow for more flexible adjustments and reconfiguration of trips by transport users. The benefits of the deployment of Intelligent Traffic Systems, Information and Communication Technologies and new vehicles technological development, in the globalising multimodal network of infrastructure and services, will depend on the grade of their possible adoption (and maintenance) by the economy and society. Administrative barriers and Big data availability as well as commercial strategies and political instability represent possible obstacles to implement and fully benefit from multimodal transport solutions.

## 2 Tplan services

Tplan is a transport consultancy dedicated to providing independent advice about transport planning, policy and infrastructures in the PPP sector.

Tplan has a global market experience and insight across road, rail, and surface transport for both private and public clients with a proven approach and highly successful track record. Tplan delivered transport consultancy services in 4 continents – Europe, Asia, Africa and the Americas, across over 40 countries worldwide.

Tplan experts have extensive experience in multimodal infrastructure policy and planning. We have managed projects for the development of multimodal transport systems at the international, national and urban transport territorial scales.

We have assessed the technical and economic feasibility of multimodal infrastructure projects overall Europe and developed multimodal transport models to understand and simulate travel behaviour to assess the financial viability and economic benefits of transport infrastructure projects and plans and prioritise transport investments and solutions.

### **Services to support to Multilateral Government Institution and Public Authorities**

- Assessment of transport policies and funding programmes
- Corridor analysis of passengers and freight demand
- Strategies and action plans for integrated and interoperable mobility
- Feasibility studies and Transport plans at urban/regional scale
- Evaluation of applications for funding under the scope of International Funding Institutions
- Ex-ante and ex-post socio-economic appraisal, including theory of change, demand modelling and Cost-Benefit Analysis

### **Services to support to Lenders and Investors**

- Commercial and Traffic Due Diligence
- Traffic demand and Revenue forecast
- Toll price studies and Benchmarking
- Independent reviews, audit and second opinions
- Buy-side and Vendor-side transaction advisory
- Risk assessment with qualitative and stochastic approaches

### **Services to support to Infrastructure Managers and Transport Operators**

- Operations efficiency analysis
- Toll strategies
- Networks and services design, restructuring and accessibility studies
- Demand and revenue forecast
- Stated Preference, RP surveys and big data analysis
- Support during Concession bids

### 3 Project experience

The following sections summarise our Advisory Team experience in the field of Smart and Sustainable Strategies since 2008.

#### 3.1 Tplan Project Experience in Multimodal and Rail Freight Corridors

- Study on the TEN-T Core Network Corridor Baltic-Adriatic (rail, road, maritime, airports) 2018-2022
- Study on the TEN-T Core Network Corridor North Sea - Baltic (rail, road, maritime, airports) 2018-2022
- Study on the TEN-T Core Network Corridor Baltic-Adriatic (rail, road, maritime, airports) 2015-2017
- Study on the TEN-T Core Network Corridor Baltic-Adriatic (rail, road, maritime, airports) 2014
- Study for the elaboration of the Multimodal Transport Model of the EUSAIR Macroregional strategy
- Evaluation of the Cost-Benefit Analysis of the Rail Baltica corridor
- Transport Market Study of the Predeal-Braşov Railway Line
- Transport Market Study of the Aphaida-Suceava Railway Line
- Study for the capacity improvement of the RFC Baltic-Adriatic
- Transport Market Study of the RFC Baltic-Adriatic
- Study for the capacity improvement of the RFC North Sea-Baltic
- Transport Market Study of the RFC North Sea-Baltic
- Intermodal Cost Study of the RFC Scandinavian-Mediterranean
- Transport demand assessment of the road/rail network interconnecting the ports, dry ports and urban nodes in the Suez Canal Economic Zones with Greater Cairo (Egypt)

#### 3.2 Technical assistance projects for the development of transport studies, market analyses and cost-benefit analyses

- CINEA – Critical review of a CBA methodological note to be adopted under the scope of CEF2 applications for funding
- INEA – Organisation of a workshop for the application of Cost-Benefit Analysis and other economic ex-ante assessment approaches and methodologies to large cross-border transport projects
- Delivery of the training courses at the CSIL Summer School about the application of Cost Benefit Analysis to transport investments
- COMCEC – Study on the Risk Management of Public-Private Partnerships (PPPs) in the Transport Sector in OIC member countries
- Support the CINEA in the review of the applications submitted under the scope of the CEF and CEF Blending Calls. The staff has so far reviewed the Cost Benefit Analysis of over 100 projects in the road, rail, and maritime sectors including several applications in the fields of Motorways of the Sea and alternative clean fuels
- Rete Ferroviaria Italiana – Framework contract agreement for the provision of traffic studies for the expansion, management and operation of the RFI national railway network in Italy – 2018-2022
- PKP PLK S.A. – Assistance and support of the development of the PKP PLK S.A. multimodal national transport model in Poland – 2015-2017
- Ex-post assessment study for the ex post evaluation of major projects supported by the European Regional Development Fund (ERDF) and Cohesion Fund between 2000 and 2013

- European Commission DG REGIO ex-ante assessment of the 2014-2020 Transport Programme for Hungary (IKOP) to confirm fulfilment of ex-ante conditionalities with respect to their strategic relevance towards the achievement of the targets set in the National Transport Strategy and EU transport policies
- TRIBUTE Interreg Project: Transnational strategy for the development of innovative and sustainable mobility in cities located in the Adriatic-Ionian region
- Study on the new urban mobility initiative for the Council of Regions
- INTER-CONNECT PLUS Interreg study for the updating of policy recommendations to enhance passenger connections between TEN-T core transport and urban nodes
- INTER-CONNECT Interreg study for the elaboration of policy recommendations to enhance passenger connections between TEN-T core transport and urban nodes
- ISTEN Interreg study identifying the main infrastructural, operational and administrative bottlenecks towards to improve the performance of the logistics chain and the integration of the logistics industry in the core transport network
- ADRIPASS Interreg study analysing ICT solutions implemented in the core nodes and identifying best practice solutions to improve transport digitalisation

### 3.3 Ex-ante transport-economic evaluations of investments and operational programs

- PATHE Railway Axis (Greece)
- Railway Line Athens (SKA) – Patras (Greece)
- Railway Line Diakopto – Rododafni (Greece)
- Budapest – Lőkösháza Railway Corridor (Hungary)
- Szajol – Puspokladany Railway Line (Hungary)
- Bari – Taranto Railway Line (Italy)
- Battipaglia – Reggio Calabria Railway Line (Italy)
- Ferrovie Sud Est Railway Network (Italy)
- Metaponto – Sibari – Paola (Bivio S. Antonello) Railway Line (Italy)
- Palermo – Agrigento Railway Line (Italy)
- Linha da Beira Baixa Railway Line (Portugal)
- Linha do Minho Railway Line (Portugal)
- Linha do Norte Railway Line (Portugal)
- Modernisation of the Railway Line 213 Reda – Hel (Poland)
- Streamlining of Łódź Railway Node (Poland)
- Multimodal Transport Junction Łódź Fabryczna Railway Station (Poland)
- High Speed Railway Line Antequera – Granada (Spain)
- High Speed Railway Line Madrid – Extremadura (Spain)
- High Speed Railway Line Madrid – Galicia (Spain)
- High Speed Railway Line Madrid – Segovia – Valladolid (Spain)
- High Speed Railway Line Lyon - Turin (Italia/Francia)
- Samsun – Kalin Railway Line (Turkey)

### 3.4 Metro systems, Subways, Urban and suburban railway lines

- Ex-post transport-economic evaluations for the European Investment Bank (urban transport)
  - Bulgaria: Sofia

- Czech Republic: Prague
- Germany: Berlin
- Greece: Athens
- Poland: Warsaw
- Spain: Barcelona, Bilbao, Madrid, Valencia
- Ex-ante and ex-post transport-economic evaluations of investments for the European Commission, DG REGIO (urban transport)
  - Greece: Attica
  - Italy: Naples, Bari
  - Poland: Warsaw
  - Portugal: Lisbon
  - Hungary: Budapest
- Ex-ante and ex-post transport-economic evaluations of investments for the European Commission, DG REGIO (urban and suburban railway lines)
  - Greece: Athens, Thessalonica
  - Italy: Bari, Naples, Palermo
  - Poland: Warsaw, Wrocław
  - Portugal: Lisbon
  - Hungary: Budapest

### 3.5 Bus Rapid Transit, light rail lines and tramway lines

- Studies concerning the transport and economic feasibility of investments
  - Italy: People Mover in Bologna, People Mover in Pisa, Latina Tramway, Turin Metro Lines 1 and 2, Turin Tramway - Line 4
  - Rwanda: Feasibility study of the Kigali Bus Rapid Transit system
- Ex-post transport-economic evaluations for the European Investment Bank
  - Belgium: Charleroi
  - France: Besançon, Bordeaux, Dijon, Grenoble, Le Havre, Le Mans, Lyon, Marseille, Metz, Montpellier, Orleans, Paris, Reims, Rouen, Tours
  - Poland: Brześć, Kraków, Poznań, Poznań Franowo, Silesia, Warsaw
  - United Kingdom: Manchester, Nottingham
  - Spain: Alicante, Zaragoza
  - Sweden: Stockholm
- Ex-ante and ex-post transport-economic evaluations of investments and operational programs for the European Commission, DG REGIO
  - France: Martinique
  - Greece: Piraeus
  - Italy: Catanzaro, Cosenza, Naples-Aversa, Sassari
  - Poland: Kraków, Gdańsk, Szczecin, Warsaw
  - Portugal: Porto
  - United Kingdom: South Yorkshire
  - Spain: Cadiz, Granada
  - Hungary: Budapest, Hódmezővásárhely

### 3.6 Local and public transport planning and policy studies

- Parma Low Emission Zone (Area Verde) (Italy)
- Public transport plan to support the PSO tender procedure of the urban and district area of Ferrara
- Carpi Local Traffic Plan (Italy)
- Latina Sustainable Urban Mobility Plan (Italy)
- Forlì Sustainable Urban Mobility Plan (Italy)
- Verona Local Traffic Plan (Italy)
- Ragusa Sustainable Urban Mobility Plan (Italy)
- Study on Cycling Promotion Policies (The Netherlands, UK)
- Study on the Low Carbon Emission and Urban Integrated Transport Policies (Germany, Italy)
- Study on Transport Demand Management Policies and Implementation of Soft Measures in London (UK)
- Assistance in preparing tender documentation for the award of connection services between the airport and the city of Venice (Italy)
- Feasibility study for low demand transport services in the Metropolitan city of Florence (Italy)
- Traffic study to support the preparation of tender documentation for the PSO services in Padua (Italy)
- Safety policies and regulations in surface rail and metro systems (Portugal / Spain)
- Benchmarking on urbanisation projects and urban public transport (Spain / Italy)
- Public Planning and Policy Studies: Study on the financing of Local Public Transport (Italy / Spain)
- Torinese Trasporti Group: Review of the LPT network of the Municipality of Turin (Italy)
- Transport study for the submission of a tender for a Public Service Obligation contract of waterbus services in the city of Venice;
- Transport study and Cost-Benefit Analysis for a new multimodal passenger terminal to be developed as part of a PPP initiative in Northern Italy;
- Study on the legislative framework and operation of the congestion charging and low emission zone schemes in Milan (Italy);
- Study on the introduction of the “Superblocks” concept in Barcelona (Spain);
- Business model and legal provisions for the instalment, financing and operation of recharging stations for electric vehicles in Italy;
- Analysis on the operational and business practices related to the Automatic Number Plate Recognition (ANPR) systems at the basis of the congestion charging and low emission zone schemes in London (United Kingdom) and Stockholm (Sweden).
- Review of the European Transport Policy Simulation Models SCENARIOS, PRIMES, SCENES and TRANS-TOOLS (EU)
- Study on Road Infrastructure Design and Development (Germany, Italy)
- Study on the Introduction and Development of the LSVV Heavy Vehicles Vignette System (Switzerland)
- Study on the Privatisation Policy for National Motorway Network (Italy)
- Review of Highway Design Standards of Highway Infrastructure (Germany, Italy)



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