



Supporting Urban Integrated Transport Systems – SUITS

# Developing bankable projects, new business models and partnerships

# Brief introduction of the Guidelines

## What are the main objectives of the Guidelines?

- Provide the knowledge of innovative business models in urban mobility services including sharing mobility, integrated mobility and MaaS.
- Address the main partnership schemes in the field and introduce the new ones.
- Enhance the capacity of creating fundable projects providing the guidance for feasibility analysis.
- Identify
  - evolving commercially viable business strategies,
  - new forms of partnership and
  - important aspects to prepare bankable documents
- Improve the administrative and organizational capacity of the urban mobility authorities of S-M cities.

## SET GOALS

- 1.
- 2.
- 3.



## Who can benefit from the Guidelines?

- Local authorities of Small and Medium sized cities
- Policy makers/Decision makers
- City planners
- Local mobility and transport companies
- R&D organisations
- Intermediaries (e.g. telecom companies, financial institutions...)
- CIVITAS and SUMPS stakeholders
- Technology developers



# Brief introduction of the Guidelines: The structure



## Urban mobility trends

- Mobility as a Service
- Integrated mobility
- Shared mobility



## Innovative forms of partnership

- PPP
- iPPP (PPP + CSO/NGO/Communities)
- R&D partnership (PPP +University/ Institution/ Research organization, companies with R&D departments)



## Innovative business models

- Business Model Canvas approach
- Brief introduction of innovative business model



## Making project bankable

- Feasibility Studies and Important Aspects of Project Management



## Business models' briefs

- Car on-demand
- Micro mobility
- Carsharing
- Ridesharing
- Bike sharing
- Parking
- Public transport
- Integrated mobility

# Brief introduction of the Guidelines: Innovative forms of partnership (iPPP)

## What is an iPPP?

Form of partnership where the main actors are public and private organisations and may include other type of organisations like civil society organizations (CSOs), non-governmental organisation (NGO) or communities.



## Benefits of iPPP :

- Address market needs and tendencies.
- Transferring localized institutional knowledge to the public and private organisations.
- Creation a collective awareness of the innovative solutions created by the alliance.
- Elaboration of the social standards and clarification schemes.
- The CSOs or NGOs may gain the social relevance and influence and builds capacity for policy monitoring.

## Practical recommendation for successful iPPP establishment:

- ✓ *Create an identity and solidarity:* choose the CSO/NGO that is well-known and relevant in transport and mobility sector.
- ✓ *Resources and mapping:* CSO/NGO should find the resources to provide and effective work.
- ✓ *Awareness-raising campaigns:* CSO/NGO should be skilled in lobbying and campaigning to promote the innovate solutions created by the iPPP.
- ✓ *Management and planning:* CSO/NGO should manage its activities and plan the interventions.
- ✓ *Monitoring and assessment:* CSO/NGO should elaborate the mechanisms for monitoring and assessing the governmental decisions, actions and plans etc.

# Brief introduction of the Guidelines: Innovative forms of partnership (R&D partnership)

## What is a R&D partnership?

Form of partnership where the main actors are public and private organisations that collaborating with universities, institutions, research companies or organisations with strong R&D departments.



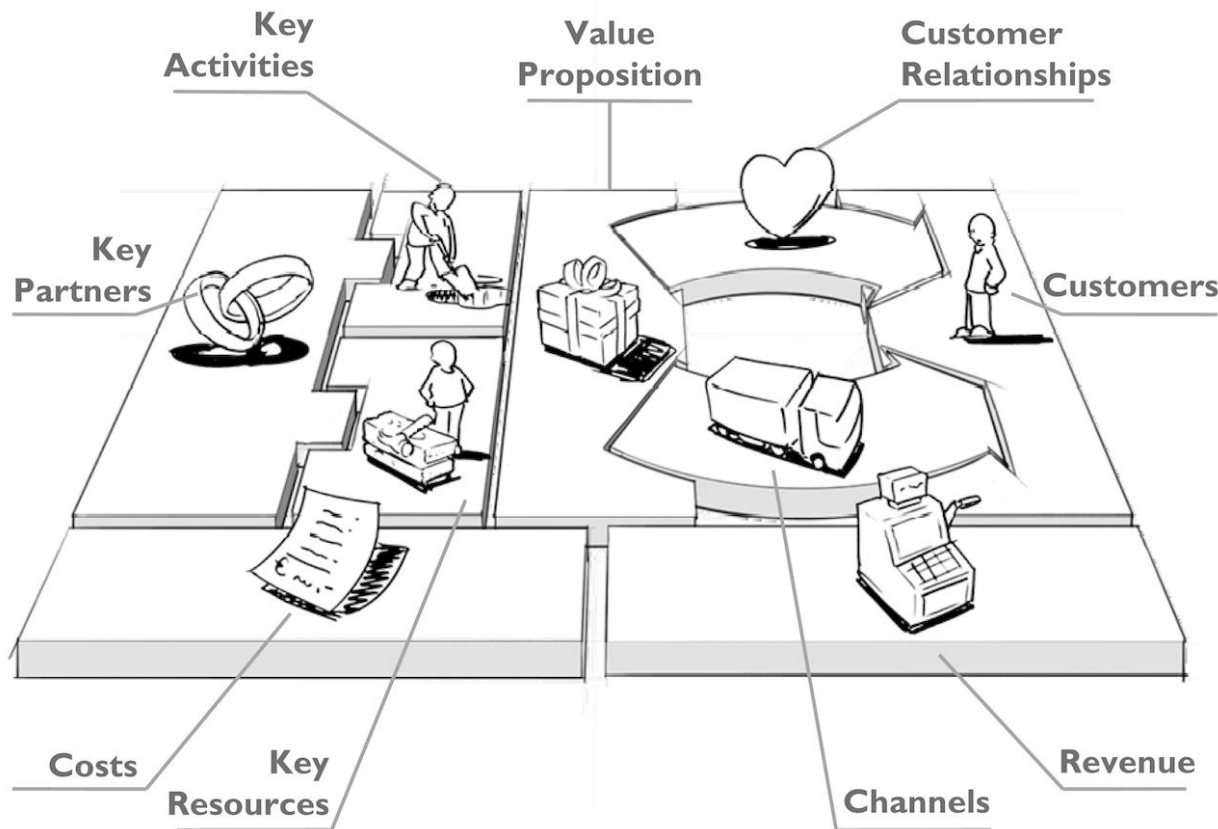
## Practical recommendation for successful R&DP establishment:

- ✓ *Leading organisation in the sector:* with a reliable reputation and strong experiences in the domain.
- ✓ *Technical equipment of the R&D should respond to the current tendencies:* to ensure that the innovation that will be developed is aligned with the market and technological trends.
- ✓ *Establish Intellectual property rights (IPR):* in the contractual it should include all the interested parties and their rights on the innovation.
- ✓ *Each partner responsibility should be clearly specified:* to avoid the risk of having high costs.

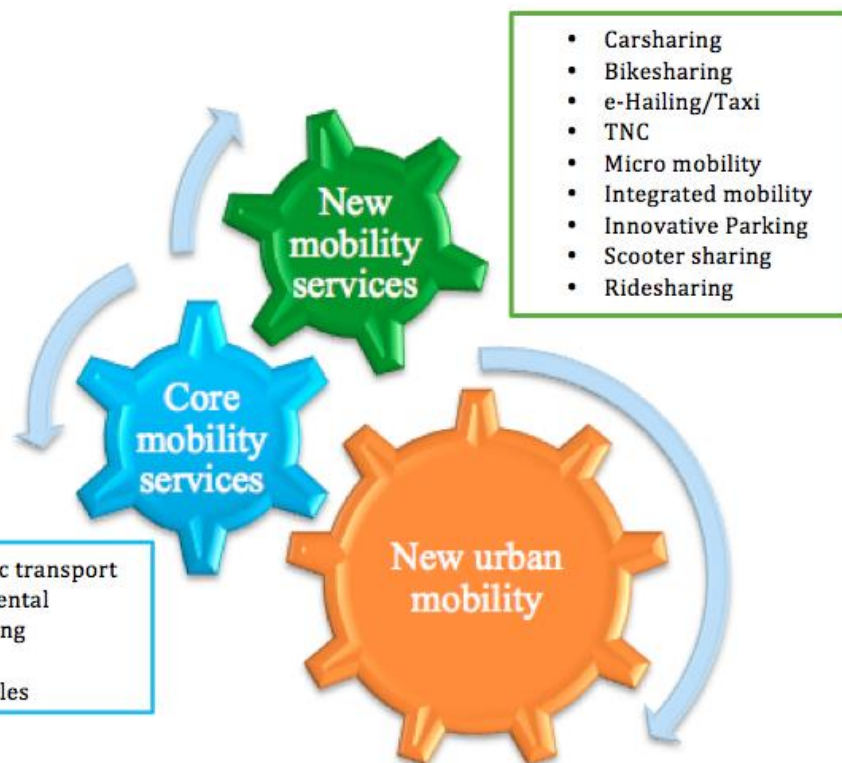
## Benefits of R&D partnership :

- R&D partner may help to develop new product or service, improve the current one or to innovate operations. Help public or private organisations to advance their business.
- Research and development costs and the risks sharing associated with the investment of time, money and other resources.
- R&D partner may help to assess the market or test the prototype.
- R&D partner provides monitoring of the project results.
- Provide an added value in searching of investments due to R&D partner expertise in the domain.

# Brief introduction of the Guidelines: Innovative Business Models (BMC)



# Brief introduction of the Guidelines: Innovative Business Models



Urban Mobility Ecosystem

Innovative mobility services	Business Model Briefs
Car on-demand	<ul style="list-style-type: none"> <li>• Taxi e-Hailing</li> <li>• Transportation Network Companies</li> <li>• Shuttle buses</li> </ul>
Micro mobility	<ul style="list-style-type: none"> <li>• Scooter sharing</li> <li>• Dedicated micro mobility</li> </ul>
Carsharing	<ul style="list-style-type: none"> <li>• One-way (free-floating, station based)</li> <li>• Round trip</li> </ul>
Ridesharing	<ul style="list-style-type: none"> <li>• Carpooling</li> <li>• Vanpooling</li> </ul>
Bikesharing	<ul style="list-style-type: none"> <li>• Station based</li> <li>• Dockless</li> </ul>
Parking	<ul style="list-style-type: none"> <li>• Innovative parking</li> </ul>
Public transport	<ul style="list-style-type: none"> <li>• Bus Rapid Transit</li> </ul>
Integrated mobility	<ul style="list-style-type: none"> <li>• Multi-Modal journey planning</li> <li>• Smart payment and e-ticketing</li> </ul>

# Brief introduction of the Guidelines: Innovative Business Models

Key aspects for implementation of Smart payment and e-ticketing	
City size	
Costs	<ul style="list-style-type: none"> <li>• Software development.</li> <li>• Control system, Back office system, On board system acquisition;</li> <li>• Vending machines and on-line distribution channels acquisition;</li> <li>• Operational staff (vendors, controllers, maintenance teams etc.);</li> <li>• Maintenance and upgrade of hardware and software;</li> <li>• Marketing and customer relationship management.</li> </ul>
Stakeholders involved	Local and regional authorities, public transport operators, financing institutions, IT engineering companies, vendors of integrated systems, e-ticketing components, software solutions etc, tourism stakeholders.
Types of investment	<ul style="list-style-type: none"> <li>• Public funding: federal, state, and local funds.</li> <li>• Private funding: grants from private foundations, private gifts and donations, and private sector investment.</li> <li>• PPP.</li> <li>• Sponsorship and advertising.</li> <li>• EU funding.</li> </ul>
Guidelines for implementation	<ul style="list-style-type: none"> <li>• Selection of the suitable investment mechanism.</li> <li>• Selection of the software developer, better with the knowledge of mobility sector.</li> <li>• Local authorities should assist in project design, customization, testing and deployment of a web-based e-ticketing system.</li> <li>• Provide an Integrated Project Plan for the entire project that covers detailed tasks which will be performed, by the project.</li> <li>• All the roles and responsibilities of the project team should be clearly identified.</li> </ul>

# Brief introduction of the Guidelines: Making a project bankable

## Feasibility Studies and Important Aspects of Project Management

### Executive summary

- introduces the project with regards to its scope, its location, who is involved and the commercial rationale for implementing the project.



### Project feasibility fields

- Product/ Service feasibility
- Technical/ Technological feasibility
- Industry/Market feasibility
- Economic feasibility
- Financial feasibility
- Operational feasibility
- Organizational feasibility
- Intellectual property
- Legal feasibility
- Risk Analysis
- Schedule feasibility
- Non-financial Impacts

- deviations and additional sections are allowed and encouraged
- There are no restrictions on the document length (10 to 20 A4 pages plus annexes)
- document should be reader friendly.

# Brief introduction of the Guidelines: Recommendations

## New forms of partnership

- Creation of solid institutional mechanism addressing specific sector policies.
- Integrated approach of financial, technical and business planning.
- Development of efficient project management regarding the business idea and contractual forms.
- Successful implementation depends on recognition of partner's objectives.
- iPPPs require careful consideration of control and management systems through project agreements.

## Innovative business models

- The business model innovation foresees the top-down approach. The top management should support and provide the resources for new business opportunity
- Constant monitoring of market tendencies
- Constant monitoring technological innovation
- Consulting the business model analogies and learning from best practices
- Searching for new investment opportunities for project development

## Bankable project

- Provide the research on different investment programs and financial opportunities
- Allocate the human resources to develop the bankable documents
- Ensure that all the necessary feasibility studies are included in the document

# Brief introduction of the Guidelines: Example of the Brief “E-ticketing and Smart payment”



## **Definition**

E-ticketing (or Electronic Ticketing, or Automated Fare Collection, or Smart Ticketing) means, in general, new technologies and integration of services that the user may pay by the means of app, smart card etc.....

## **Main Concepts of e-ticketing**

- Application of smart technology to access Public Transport in easier and faster way may provide the advantages for Public Transport operator as well as for travellers.
- The Internet enables to create and manage a personal transport account,
- Save travelling time: the traveller have no need to pass by vending machines.
- Post-payment process and Pay-as-you-Go provide an automatic calculation in order to estimate the price after the journey.

## **Benefits for the stakeholders for implementing e-ticketing system**

### *Public transport operators*

- e-ticketing could reduce administrative costs (fewer cashier, fare processing times, etc.).
- fraud and fare evasion could be reduced and better pricing can be introduced.
- E-ticketing enables a better integration of alternative services into the scheme.
- Costs apply that can be easily quantified, e.g., investment and operation costs

### *Local and regional authorities*

- Transfer of the knowledge and technical expertise to other sectors
- E-ticketing could create a positive economic climate for companies.
- E-ticketing could increase public transport use
- Good branding may provide a strong identity and reputation to the community.

### *User*

E-ticketing system permit to simplify the use of public transport by using pre-payment system, electronic wallet or bank account to access public transport services.

# Brief introduction of the Guidelines: Example of the Brief “E-ticketing and Smart payment”

## Business Model Canvas

<b>Key Partners</b>  1. Local and regional authorities; 2. Public transport operators: public transport services suppliers; 4. Financing institutions. ; 5. Telecommunications operators; 6. Engineering companies; 7. Suppliers: vendors of integrated systems, of e-ticketing components; 8. Tourism sector.	<b>Key Activities</b>  1) Public transport planning; 2) Fare and compensation policy planning; 3) E-ticketing system architecture design; 4) Implementation of the e-ticketing system's components at the level of public authority and public transport operator; 5) Operation of the e-ticketing system; 6) Selling of electronic fares; 7) Control of e-ticket validity; 8) Monitoring and data mining.	<b>Value Proposition</b>  The introduction of an e-Ticketing system in an urban public transport network will help the Local and Regional Public Authority to deliver on three strategic objectives – reduce its subsidy to the Public Transport Operator, increase the quality of urban transport service provided to taxpayers and reduce the use of cash in the provision of urban transport services.	<b>Customer Relationships</b>  self-service, automated services, personal assistance (regarding prepaid-value model)	<b>Customer Segments</b>  1. Public transport users: • Occasional users; • Subscription based users; • Beneficiary of special tariffs. 2. Non-public transport users: • Companies paying for their employees; • Public authorities paying for beneficiaries of special tariffs.
	<b>Key Resources</b>  1. Distribution channels: • online shops for ticket sales and distribution, • mobile application for ticket distribution and emulation, • third party retail network, • public transport operator POS equipment, • off-board ticket dispensers and • ticket vending machines. 2. Fare media: • printed barcodes for single tickets and • contactless smartcard for season and concession fares. 3. On-board validation equipment for vehicles. 4. Inspection equipment. 5. Core-ticketing system in back-office: • operator clearing and settlement, • account based ticketing management, and • revenue control, reporting and monitoring.		<b>Channels</b>  web sales, sales point (regarding prepaid-value model)	
<b>Cost Structure</b>  1. Capital expenditures: • Preliminary studies and engineering design; • Back office system acquisition; • On board system acquisition; • Vending machines and on-line distribution channels acquisition; • Control system acquisition. 2. Operating expenses: • Operational staff (vendors, controllers, maintenance teams etc.); • Maintenance and upgrade of hardware; • Maintenance and upgrade of software; • Marketing; • Customer relationship management.		<b>Revenue Streams</b>  1. Public transport fares selling; 2. Advertising (on cards, in the web or mobile selling apps etc.).		

# Thank you for your attention!



frederic.rudolph@wupperinst.or



aleksei.lugovoi@arcadis.com



iana.dulckaia@eurokleis.com



stefan.roseanu@integralconsulting.ro



**E-Learning course at:**  
<http://www.nuacampus.org/elearning/>

<http://www.suits-project.eu>