

# Future Research Agenda for Cooperation with Mediterranean Partner Countries

**Joint recommendations on policy for future  
research agenda for cooperation with  
Mediterranean Partner Countries**



**30 June 2014**

## 1. Introduction

The European Commission identifies Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, Syria, Tunisia and Turkey as Mediterranean Partner Countries (MPC). MPCs are a very diverse group, both economically and politically. From a socio-economic point of view, many countries in the region face a substantial level of transport poverty, affecting in particular people on low incomes, women and vulnerable people (young people, the elderly and people with disabilities and/or reduced mobility). Israel and Turkey, as OECD countries have mobility issues that are much more comparable to European Union member states.

The urbanisation rate in MPCs, which stood at 64% in 2000, is going to grow up to 72% by 2025. This high level of urbanisation and urban extension, concentrated along the coastline is provoking constant increases in demand for travel, both of people and goods, and this is happening against a background of inadequate urban planning. Cities are experiencing a high level of accumulation and concentration of economic activities and are characterized of complex spatial structures that should be supported by efficient transport systems. The larger the city, the greater its complexity and the potential for disruptions, particularly when this complexity is not effectively managed. The most important transport problems are often related to urban areas and take place when transport systems, for a variety of reasons, cannot satisfy the numerous requirements of urban mobility with negative impacts in road transport in terms of inefficiency, congestion, poor public transport service, land use, traffic accidents, air emissions - with severe implications on human health, energy consumption, etc.

This urgent necessity, which cannot be postponed, of the MPCs countries to cope with the realization of an efficient and sustainable urban transport system presents a unique opportunity of the European industries to penetrate and influence this huge new market.

Thus, Europe should encourage the transfer and implementation of new knowledge, research and infrastructures that have been adopted not only in the developed countries but also in the other new emerging economies such as Brazil and China where the EU has already established efficient cooperation and good working relationship with several local stakeholders. Indeed, the transfer of best practices tends to be more and more globalized: the Bus Rapid Transit, for example, which was firstly implemented in Brazil has spread very fast across the continent but also Asia (it has been successfully adopted in Turkey and it is currently under construction in Amman), North America and Europe and more recently also in Africa. The similarities in economic and social fields make the transfer of urban mobility solutions more efficient while the benefits could be extended to MPCs through new business partnerships and empowerment projects.

Nevertheless, MPCs do not only need investments in terms of infrastructures but at the same time the managerial perspective must be realized in term of planning, designing and assessing urban transports facilities. Intelligent Transport Systems (ITS) have been proved in many EU countries to be an effective solution for addressing existing and future transport problems and challenges. Today, there is vast knowledge, and several research activities and applications being undertaken and developed respectively in different EU countries about ITS but there is still a considerable lack of knowledge and experiences in this field in the MPCs Countries. The adoption of Sustainable Urban Mobility Plans (SUMPs) that will allow an efficient management of transport systems prove to be an important prerequisite for the adoption of public transport systems. This new approach will involve citizens and stakeholders as well as the coordination of policies between different sectors (transport, environment, social inclusion, safety etc.).

Based on the assessment of city needs and the identification of current gaps in MPCs, this document provides some recommendations for future research with the aim to improve cooperation with the Mediterranean Partners Countries in order to encourage MPCs to adopt sustainable urban transport solutions in the near future.

## **2. Challenges and Enablers to Fostering cooperation with Mediterranean Partners Countries**

Transport is an important sector in the MPCs for facilitating mobility of people and goods, trade and regional integration while it plays a key role towards the economic vitality of cities ensuring that local and regional economies perform efficiently. Today, the continuous economic development of MPCs relies on expanding and strengthening transport infrastructure both within and between the MPCs and also between the region and the EU. The region's proximity to key markets, continued population growth and economic development make modern, efficient and well-planned transport infrastructure crucial for the region's future. Infrastructure and efficient urban transport systems are key drivers for both growth and the competitiveness of these countries within the global trading system.

The main objective of MPCs is to address the increased traffic volumes and the resulting level of congestion within the city and highly populated areas that lack the appropriate public transport facilities and related infrastructure. While achieving this, the resulting environmental externalities can be efficiently addressed. Preserving the environment and improving the living conditions for city residents is an important aspect, which should be taken into careful consideration. To do this, the newly developed public transport system should be: reliable, economical and safe for everyone. Special groups such as children, elderly, handicapped and poor people, who do not own a car, will be the main beneficiaries of this sustainable approach.

Last, but not least, the social challenge, that means fighting against poverty and social exclusion of young people, elderly and people with disabilities and/or reduced mobility by encouraging the inclusion of disadvantaged population groups in public transport networks and supplying for people with special needs will be vital measures for stability and justice. Sustainable mobility is also about giving everyone access to the transport network under acceptable conditions in terms of time and cost.

To overcome these challenges, to the cooperation between MPCs and leading research institutions proves to be important facilitating the undertaking of profound and multi-disciplinary research thus sharing from the EC experience in terms of problem solving through analytical tools and capabilities to provide decision support and policy recommendations. Cooperation with the top experts in the respective research fields will assist in raising the standard and quality of research.

Stakeholders in MPCs indicate that raising awareness of sustainable transport policy among policy makers is essential since many politicians in the region still see development of infrastructure as the key transport policy. A good quality level of public transport services in a city can have short and long term social and economic benefits ranging from economic growth, better accessibility to employment and education, to reduced pollution. However, the importance of public transport has not yet been fully understood by the politicians and citizens. Cooperation with the EU and other international organisations on raising awareness of sustainable transport policy is considered as a key priority.

### **3. Recommendations for innovative and sustainable urban mobility solutions**

An amalgamation of the findings from both Viajeo-Plus and SOLUTIONS projects has led to a series of research recommendations as presented within the following sections of this deliverable. These recommendations identify areas that can potentially deliver high impact solutions to the current urban mobility and economic challenges faced in the MPCs.

For each research area/recommendation, the title is shown, with the full description shown in the Chapter 4.

#### **Theme 1: Facilitating deployment of Intelligent Transport Technologies (ITS) in MPCs**

The Mediterranean countries, besides Turkey and Israel, have limited experiences and knowledge on ITS technologies. However, ITS technologies are considered important to improve urban mobility in the region. It has been identified by the local stakeholders that ITS can be used to improve public transport service, urban traffic control and operation, as well transport planning. ITS have been seen as a 'Holy Grail' to solve congestion, air pollution and reduce the high rate of traffic accidents. There are great interests from the region to cooperate with EC on ITS. The first step may be dissemination of best practices on ITS in order to raise awareness of ITS technologies and increase acceptance of ITS technologies among policy makers and the general public. Since the locals have limited experiences on ITS, training on ITS technologies and their applications are essential for ITS deployment.

Priorities for cooperation with the EU are identified with MPCs:

- 1.1 Providing training to local stakeholders including transport professionals and policy makers on ITS technologies and their applications
- 1.2 Raising awareness of ITS and disseminating best practices of applications of ITS in order to increase acceptance of ITS technologies among policy makers and the general public
- 1.3 Use of social media to collect traffic data and disseminate traveler information
- 1.4 Use of ITS to improve public transport services such as in-vehicle monitoring systems, fleet management, traveller information services, smart ticketing and bus signal priorities.

#### **Theme 2: Sustainable Urban Mobility Plans (SUMP)**

The need for active participation of all sectors of society in consultation and discussion, relating to sustainable development and the planning of the future of the cities was already formulated in the Brundtland Report in 1987. At the European level several initiatives evolved to promote the broad introduction of sustainable urban mobility planning. To underline its significance, the European Commission put sustainable urban mobility planning as the first action of the Action Plan on Urban Mobility in 2009. The importance is reiterated in the Transport White Paper 2011, by demanding that "cities should be encouraged to develop Urban Mobility Plans" and examining

"the possibility of a mandatory approach for cities of a certain size, according to national standards based on EU guidelines" and thus linking urban mobility plans to regional development and cohesion funds. The 2013 EU Urban Mobility Package puts SUMP at the heart of urban mobility policies and a SUMP coordination platform will steer SUMP activities at the European level.

Key to successful SUMP development is that they must integrate all modes used, they should consider the broader social, environmental and economic aspects and they should have a strong participatory nature with a variety of stakeholders, local citizens and key interest groups being consulted.

Sustainable urban mobility planning is a rather diverse process and, although transfer of experiences and good practices exists, take-up in the different parts of the world remains challenging. The European Commission supported the development of SUMP Guidelines providing European cities and regional/national authorities with guidance for implementing a sustainable urban mobility planning process. These guidelines are being adapted to the specific conditions in other regions of the world.

There is a huge potential to transfer the concept of SUMP to cities outside Europe. Due to different political context, the SUMP concept might be only partly transferable to cities in some MPCs. However, integrating some aspects of SUMP might already lead to positive effects on urban mobility planning in these regions.

Priorities of cooperation include knowledge sharing, capacity building and networking activities. The recommendations are:

- 2.1 General preparation of a SUMP
- 2.2 Stakeholder coordination and involvement in integrated planning / SUMPs

### **Theme 3: Financing sustainable urban transport**

In times of constrained budgets, financial resources for sustainable transport are often lacking. Different modes are competing with each other for the limited transport budget. The financing structure can encourage or discourage the development of a sustainable urban transport system. Financing structures vary among countries and so does the option to raise additional revenues. Many cities are looking for innovative ideas for financing sustainable transport, while limiting the costs of the users, which are often very price sensitive.

Cities in the Mediterranean expressed a strong interest in innovative financing approaches for financing transport infrastructure and the priorities expressed are:

- 3.1 Financing public transport
- 3.2 Financing infrastructure for non-motorized modes

### **Theme 4: High quality public transport system**

Public transport is a crucial factor for providing access and achieving liveable cities and metropolitan areas. In face of urban traffic congestion, air pollution, climate change and energy consumption, public transport is taking an increasingly prominent role as the core part of sustainable urban mobility concepts. Successful high-capacity mass transit and the integration of different public transport systems and operators is of significant interest and importance to

cities in emerging countries suffering from increasing urban populations and limited space for transport.

Proposed topics:

- 4.1 Public transport organisation/integration
- 4.2 Bus priority measures and BRT systems

**Policy Objectives & technical areas of the Recommended Priorities**

Priority		Policy Objectives				
		Cost Efficiency	Modal shift	Social inclusion	Environmental sustainability	Competitiveness
Facilitating deployment of Intelligent Transport Technologies (ITS) in MPCs	1.1 Providing training to transport professionals and policy makers				X	X
	1.2 Raising awareness of ITS and disseminating best practices of applications				X	X
	1.3 Use of social media to collect traffic data and disseminate traveller information	X	X	X	X	
	1.4 Use of ITS to improve public transport services	X	X	X	X	X
Sustainable Urban Mobility Plans (SUMPs)	2.1 General preparation of a SUMP			X	X	
	2.2 Stakeholder coordination and involvement in integrated planning / SUMPs		X	X	X	
Financing sustainable urban transport	3.1 Financing public transport	X	X	X	X	
	3.2 Financing infrastructure for non-motorized-modes	X	X	X	X	
High quality public transport system	4.1 Public transport organisation/integration		X	X	X	
	4.2 Bus priority measures and BRT systems	X	X			X

## **Chapter 4: Recommendations**

## Theme 1: Facilitating deployment of Intelligent Transport Technologies (ITS) in MPCs

### Recommendation 1.1: Providing training to transport professionals and policy makers on ITS technologies and their applications

#### Motivation

Since there are very limited experiences and real practices of ITS in the region, transport professionals and policy makers lack knowledge and skills on the state-of-the-art of ITS. Such transport professionals may be aware of benefits of ITS. Therefore, they are keen to learn ITS and to understand how to apply ITS to solve transport problems in their countries. It is essential to provide training on ITS technologies to local stakeholders and such training can have great impacts on facilitation of the implementations of ITS technologies. Such training will also lead to more sustainable transport policy and enhance Europe's soft power in the region.

#### Activities

- Development of training materials to summarise key technologies and use cases;
- Organising training seminars or summer schools in the targeted countries;
- Organising study tour in Europe to bring key policy makers from the targeted countries to have first-hand experience of ITS applications;
- Organising workshops to allow face-to-face discussions between cities from target countries and European cities on applications of ITS technologies;
- Publish training materials and building database for technologies and their use cases (real applications)

#### Expected impacts:

- Facilitations of uptake of new technologies in order to reduce pollutions and improve traffic safety;
- Strengthen European ITS industry's competitiveness

**Type of project:** Coordination and Support Actions (CSA)

**Target countries:** Algeria, Egypt, Jordan, Egypt, Lebanon, Morocco, Palestine, Syria

**Partners:** EC industry, research institutes, universities in Europe and target countries, European cities and cities from the target countries

**This priority covers the following areas:**

X	Network and mobility management
	Clean vehicles
X	Infrastructure
X	Logistics
X	Public transport
	Integrated Planning

**Source of the recommendation:** outcomes of Viajeo Plus Questionnaires & 1<sup>st</sup> MPC forum

**Recommendation 1.2: Raising awareness of ITS and disseminating best practices of applications of ITS in order to increase acceptance of ITS technologies among policy makers and the general public**

**Motivation**

In the region many policy makers still consider building more roads as the only solution to solve traffic congestion. Since many major cities in MPCs have historic city centres building new infrastructure often damage the historic heritages. Lack of awareness of ITS has become the key factor to prevent sustainable transport policy. Many local stakeholders do not realise that there is an option of using technologies to better manage transport network. Raising awareness of ITS can play an important role not only in long-term sustainable transport policy and applications of ITS.

**Activities**

- Organising conferences and workshops to invite European cities to present their experiences to local stakeholders such as government officials, city representatives, transport planner and engineers;
- Publishing leaflets and brochures on ITS and their benefits;
- Organising public events to demonstration ITS technologies

**Expected impacts:**

- Facilitations of uptake of ITS technologies and more sustainable transport policy in the region;
- Strengthening European ITS industry's competitiveness in the region;
- To help the region to benefit from ITS technologies, thus reducing congestion, air pollution and improving quality of life

**Type of project:** Coordination and Support Actions (CSA)

**Target countries:** Algeria, Egypt, Jordan, Egypt, Lebanon, Morocco, Palestine, Syria , Turkey

**Partners:** EC industry, research institutes in Europe and MPC, major European cities with good experiences in ITS, international organisations such as ERTICO, FIA, EURO CITIES, UITP etc.

**This priority covers the following areas:**

X	Network and mobility management
	Clean vehicles
X	Infrastructure
X	Logistics
X	Public transport
	Integrated Planning

**Source of the recommendation:** outcomes of Viajeo Plus Questionnaires & 1<sup>st</sup> MPC forum

**Recommendation 1.3: Use of social media to collect traffic data and disseminate traveller information**

Traffic data plays an important role in traffic management, transport planning and traveller information services. However, due to lack of roadside sensors in infrastructure, there is very few traffic data sources available in MPCs. Since Roadside sensors are expensive for both implementation and maintenance, MPCs should look for alternative solutions to collect traffic data. The high market penetration rate of smart phones in MPCs provides a unique opportunity for innovative traffic data collection. Smart phones can also be used to disseminate traveller information that would motivate travellers to provide information. A research project with demonstrations in selected cities would be an efficient way to facilitate deployment of such technologies, thus improving transport services in the region.

Key activities will focus on:

- Development of mobile apps to allow travellers to give information while travelling (crowdsourcing);
- Development of a platform to process data collected from crowdsourcing
- Development of mobile apps to disseminate traveller information
- Open processed data and provide manuals to allow any app developers to develop apps

**Expected Impacts:**

- Facilitations of uptake of new technologies in order to improve transport services and traveller information;
- Introducing new technologies to MPCs and open competitions in traveller information services;

**Target countries:** Turkey

**Type of project:** Research and Innovation (RI)

**Partners:** Research institutes in Europe and Turkey, Turkish and European cities, IT

**This priority covers the following areas:**

X	Network and mobility management
	Clean vehicles
	Infrastructure
	Logistics
X	Public transport
	Integrated Planning

**Source of the recommendation:** outcomes of Viajeo Plus 1<sup>st</sup> MPC forum

**Recommendation 1.4: Use of ITS to improve public transport services such as in-vehicle monitoring systems, fleet management, traveller information services, smart ticketing and bus signal priorities**

**Motivation**

Most cities in MPCs have no comprehensive public transport services. In most cities, car (private car or taxi) is the primary transport mode, resulting in severe congestion, high air pollution and noise levels in city centre areas. Due to lack of public transport, those who have no cars or no budget for taxi, i.e. often young people and women, have very limited mobility, and limited opportunities for education and jobs. Therefore, improving public transport has been identified as a key priority for cooperation with Europe. Use of ITS such as in-vehicle monitoring system to improve safety and efficiency (eCo-driving), fleet management, traveller information services and smart tickets. Yet this is no traffic signal priorities for buses in MPCs and many local stakeholders are interested in such application.

Such research may select a number of pilot cities in MPCs and cooperate with local bus operators. Based on needs and characteristics of local transport, a number of ITS technologies may be applied. Demonstration should run about 3 or 6 months during the project and evaluation on impacts of such technologies should be collected and disseminated to other cities in the region.

**Activities**

- Study of user needs including needs from local bus operators and passengers
- System design and implementation
- System verification and integration
- Demonstration for 3- 6 months
- Evaluation of system performance and social impacts
- Dissemination of technical achievements and benefits

**Expected Impacts:**

- Introducing ITS to public transport in the region and improving public transport services
- Encouraging usage of public transport and reducing congestion and air pollution
- Strengthening competitiveness of European industry

**Target countries:** all MPCs

**Type of project:** Research and Innovation Actions (RIA)

**Partners:** ITS and system providers, research institutes in Europe and MPCs, bus operators in MPCs

**This priority covers the following areas:**

X	Network and mobility management
	Clean vehicles
X	Infrastructure
	Logistics
X	Public transport
	Integrated Planning

**Source of the recommendation:** outcomes of Viajeo Plus 1<sup>st</sup> MPC forum

## Theme 2: Sustainable Urban Mobility Plans (SUMPs)

### Recommendation 2.1: General preparation of a SUMP

#### Motivation:

Cities in the target regions experienced a rapid and partly chaotic growth over the past decades and most are still expanding crossing municipal borders. SUMP can significantly contribute to a better and more sustainable urban transport system in these cities.

The objective of a SUMP is to create a comprehensive basis for long-term mobility planning in an urbanised area. A Sustainable Urban Mobility Plan (SUMP) is applied for the entire urban area (including peri-urban/urbanised region). The characteristics of a SUMP are:

- a pledge of sustainability,
- the involvement of stakeholders and citizens in a structured collaborative process,
- the implementation of integrated packages of measures including different types of instruments (planning, technical, pricing, information etc.),
- coordination of the process regarding project timeline, spatial coverage and participating institutions, and
- a focus on achieving measurable targets.

#### Proposed activities

- Establishing an international knowledge exchange network on SUMPs
- Training and capacity building for local practitioners in the target regions
- Development of tailor-made SUMPs guidelines for the target regions
- Dissemination of best practices in SUMP
- Organising conferences and workshops to invite European cities to present their experiences to local stakeholders such as government officials, city representatives, transport planner and engineers

#### Expected impacts:

- More sustainable transport planning in the cities implementing SUMP
- Positive influence on the planning process (public participation, stakeholder integration)
- Increased awareness of long-term effects of (unsustainable) transport planning

**Target countries/regions:** all MPCs

**Partners:** research institutes from Europe and MPC international organisations e.g. UN, cities

**This priority covers the following areas:**

	Network and mobility management
	Clean vehicles
	Infrastructure
	Logistics
	Public transport
x	Integrated Planning

**Source of the recommendation:** SOLUTIONS consortium partners

**Recommendation 2.2: Stakeholder coordination and involvement in integrated planning / SUMP**

**Motivation:**

Sustainable urban mobility planning can only be successful if different mobility related stakeholders (operators, providers, users) are involved in the planning process. The SUMP planning-cycle requires well-structured involvement of the relevant stakeholders throughout key stages of the process. The participation of actors from beyond city boundaries is equally relevant. Involving different government sectors helps to work across administrative boundaries, which is highly relevant in cities spreading beyond their boundaries. Many cities participating in the solutions project face challenges in integrating different transport providers to work on a joint strategy. Cities were highly interested in the ‘mobility pact’, which the city of Barcelona defined among its mobility related stakeholder in already 1998. In many cities of the target region informal public transport plays a major role and has to be integrated in the process as well.

**Proposed activities**

- Training and knowledge exchange on means to anchor stakeholder involvement in the planning process
- Dissemination of best practice examples of stakeholder participation

**Expected impacts:**

- Better integration of different transport providers
- Accelerated implementation processes

**Target countries/regions:** all MPCs

**Partners:** research institutes from Europe and MPC, international organisations e.g. UN, cities, transport operators

**This priority covers the following areas:**

	Network and mobility management
	Clean vehicles
	Infrastructure
	Logistics
	Public transport
x	Integrated Planning

**Source of the recommendation:** SOLUTIONS consortium partners

### Theme 3: Financing sustainable urban transport

#### Recommendation 3.1: Financing public transport

**Motivation:**

Public transport systems require high levels of capital investments (for infrastructure and rolling stock/vehicles) and funding (subsidies) to cover operations and service delivery. Generally speaking, and especially in Europe, public actors assume the responsibility for the provision of infrastructure, while operators are expected to deliver predefined service levels with revenues coming from fares and other sources. In many cases an increasingly small amount of financial support or compensation for special fares (such as school children, and the elderly) is available from the public purse. Opening the market to competition as done recently in Europe, innovative financing options (e.g. public private partnerships, value capturing), revenue generating policies (e.g. parking pricing), private investments or international funding may allow for the provision of sufficient capital for infrastructure and system's operation, while striking a good balance between high service level and reasonable pricing.

**Proposed activities**

- International knowledge exchange on innovative financing solution
- Leveraging domestic/private finance by targeted co-funding and loans
- Cooperation of funding institutions and vehicle manufactures to provide attractive financing models

**Expected impacts:**

- Expansion of the public transport networks
- Improvement of service quality in public transport
- Maintaining or increasing the modal share of public transport

**Target countries/regions:**MPC

**Partners:** research institutes from Europe and MPC, financing organisation e.g. development banks, public transport operators

**This priority covers the following areas:**

	Network and mobility management
	Clean vehicles
X	Infrastructure
	Logistics
X	Public transport
	Integrated Planning

**Source of the recommendation:** SOLUTIONS consortium partners & outcomes of Viajeo-Plus Questionnaire survey

**Recommendation 3.2: Financing infrastructure for non-motorized-modes**

**Motivation:**

Appropriate infrastructure for pedestrians and cyclists need to be available to ensure safety and comfort. Especially vulnerable groups such as elderly, children or low income households are depending on walking and cycling. Further, a high quality system for NMT can induce a shift from motorized transport to non-motorized modes. NMT infrastructure results in considerably improved safety and comfort of pedestrians and cyclists often accompanied by generally improved quality of life in the locality (reduced noise, improved aesthetics). Different infrastructural measures are available at different costs (e.g. from improved placement of sights and lightings to cycle highways). In contrast to other modes, costs for NMT infrastructure cannot be partly recovered via pricing or fees.

**Proposed activities**

- Raising awareness on the role of NMT infrastructure
- Sharing very cost-effective NMT infrastructure solutions
- Dialogue on the technical and economic feasibility and funding environment to increase the introduction of NMT infrastructure

**Expected impacts:**

- Improvements in the quality of NMT infrastructure
- Increasing/maintaining the share of non-motorized modes

**Target countries/regions:** MPC

**Partners:** research institutes from Europe and MPC, financing organisation, cyclists associations etc.

**This priority covers the following areas:**

	Network and mobility management
	Clean vehicles
X	Infrastructure
	Logistics
	Public transport
	Integrated Planning

**Source of the recommendation:** SOLUTIONS consortium partners

## **Theme 4: High quality public transport system**

### **Recommendation 4.1: Public transport organisation/integration**

#### **Motivation:**

An integrated public transport system can offer a higher quality and comfort level. Integrated planning of the public transport network ensures high connectivity and avoids fragmented competences. Integrated ticketing systems for public transport are one of the basic conditions required to provide convenient access to a public transport system in a city. Integrated fare systems are now commonplace in Europe; experience can be shared and promoted among other cities along with experience from other parts of the world. The barriers are the need for cooperation between a number of different authorities and operators, and difficulties arising from revenue sharing, interoperability and data protection issues.

Furthermore, in Europe, integrated transport authorities, which oversee public transport, infrastructure and planning have been established in London and Budapest.

#### **Proposed activities**

- Sharing international experience with integrated ticketing and revenue sharing
- Technical improvements in integrated ticketing systems
- Show-casing best practices

#### **Expected impacts:**

- Better coordination between different public transport systems
- More attractive public transport systems
- Spread of technical solutions for integrated ticketing

#### **Target countries/regions: MPC**

**Partners:** research institutes from Europe and MPC public transport authorities and operators, technical infrastructure providers for integrated tickets

#### **This priority covers the following areas:**

	Network and mobility management
	Clean vehicles
	Infrastructure
	Logistics
X	Public transport
	Integrated Planning

**Source of the recommendation:** SOLUTIONS consortium partners, outcomes of Viajeo-Plus Questionnaire survey and the 1<sup>st</sup> MPC Forum

### Recommendation 4.2: Bus priority measures and BRT systems

**Motivation:**

Bus priority (e.g. achieved by dedicated bus lanes and/or prioritization at traffic signals) allow the speed of buses to be maintained to that they run to schedule, making services more reliable and helping to deliver fuel savings. The aim of bus priority is to increase the average speed of public transport buses in cities and to provide passengers with more reliable journeys and can be a first step towards a more sophisticated BRT system. Bus Rapid Transit (BRT) mimics a metro system, by using regular buses on city streets, but on dedicated lines, with relatively large capacity and high average speeds. As such, public transport is given clear preference on the urban road network and a reliable public transport service can be provided at a fraction of the cost of a metro system. Approximately 160 cities across 38 countries have BRT systems or priority bus corridors. The concept was developed in Latin America and has spread very fast across the continent, but also Asia, North America and Europe and more recently also Africa. While there are a number of success stories to explore in this area, there are also some cases where the introduction of BRT systems has not been so successful. Uncovering both the successes and the failures, and their underlying factors, will be equally important in better understanding the transferability of BRTs.

**Proposed activities**

- Exchange between Europe and the target regions on technology and policy issues as well as on operational and funding structures
- Research on the causes of failed BRT systems

**Expected impacts:**

- Provision of low cost but high capacity and high quality public transport for medium sized cities in the target regions

**Target countries/regions:** MPC (Particularly in Turkey)

**Partners:** research institutes from Europe and MPC, ITS providers, equipment providers

**This priority covers the following areas:**

	Network and mobility management
	Clean vehicles
	Infrastructure
	Logistics
X	Public transport
X	Integrated Planning

**Source of the recommendation:** SOLUTIONS consortium partners & outcomes of Viajeo-Plus Questionnaire survey and the 1<sup>st</sup> MPC Forum