



## Sustainable Urban Mobility

# Exchange Experiences between Europe and Latin America

## Rio de Janeiro and São Paulo, Brazil

### Programme

23-25 March 2015

**The event** aims at facilitating knowledge exchange and experience sharing between Latin America and Europe on sustainable urban mobility and identifying main areas of interest for future cooperation to exploit potential business opportunities and collaborate in R&D activities in this area. It will gather technical experts, policy makers and researchers to present their achievements on sustainable urban mobility solutions, to discuss their needs and to exchange their experiences with implementation of innovative technologies or policies.

The event is organized by Viajeo Plus consortium. **Viajeo PLUS** is an EC funded FP7 international cooperation project, aiming at benchmarking outstanding solutions for innovative and green urban mobility in Europe, Latin America, China and Singapore and subsequently facilitate the uptake of these solutions across different cities in these regions, and in Mediterranean Partner Countries (MPCs).

Organised by





<b>VENUE</b>	<b>Rio de Janeiro – Brazil</b> <b>FETRANSPOR:</b> Federação das Empresas de Transportes de Passageiros do Estado do Rio de Janeiro Rua da Assembléia, 10, Salas 3911-3920 - Centro, Rio de Janeiro - RJ, 20011-901 (21) 3221-6300
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<b>DAY 1</b>	<b>Monday 23<sup>th</sup> March 2015</b>
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<b>Opening and keynote presentations</b>	<b>Moderator:</b> Ms Manuela Flachi, ERTICO – ITS Europe
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	Welcome to Rio de Janeiro	Mr. Alberto Nygaard, Transport Municipality of Rio de Janeiro
	Overview of the Viajeo Plus project and objectives of the city showcase in LA	Ms Manuela Flachi, ERTICO– ITS Europe
	2016 Olympic Mobility Plan – Brazil transport challenges	Ms Simone Silva, Transport agency in the Municipality of Rio de Janeiro

<b>Best mobility practices implemented in Latin America cities</b>	<b>Moderator:</b> Mr. Alessandro Santiago - IPT
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	Innovative Public Transport Solutions and enabling Infrastructure in Brazil	Mr. Stenio Franco, UITP Latin America and Brazilian Association to Public Transportation
	Introduction to transport policies in Cariacica city (Brazil)	Ms Simone Franco Garcia, Chief of the Mayor Cabinet of Cariacica city
	TURBLOG transferability case study in Cariacica	Dr. Paul Timms, University of Leeds
	Attractive and sustainable mobility - Mexico City	Dr Magnus Kuschel, Commute Greener
	Logistics services in Brazilian cities	Mr José Haerdy, Michelin Brazil
	Q&A: recommendations for future cooperation: the way forward	

<b>Best mobility practices implemented in European cities</b>	<b>Moderator:</b> Mr. Guido Di Pasquale, Pluservice
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	Best mobility practices in Madrid	Mr. Sergio Fernandez Balaguer, EMT, City of Madrid
	Best mobility practices in Lyon	Ms Diana Diziain, Communauté urbaine de Lyon
	Best mobility practices in Istanbul	Ms Betul Guney, IMM, City of Istanbul (TBC)
	Sustainable public transport in Gothenburg	Mr. Mats Rosenquist, Gothenburg, Volvo

<b>Fare and ticketing system implemented in world cities</b>	<b>Moderator:</b> Mr. Guido Di Pasquale, Pluservice
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	BIP Cuneo and Regional Service Centre: multi-	Mr. Guido di Pasquale, on behalf of ATI Saluzzo –
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	operator ticketing and clearing”	Association of Cuneo Province PT
	Tolling payment for Public Transport Development	Ms Hanne Bertnes Norli, Ruter, Oslo City
	Fight against frauds in the public transport sector	Mr. Cândido André Rodrigues , Empresa 1, Fortaleza

**Technical solutions implemented in Rio de Janeiro**

	Operational Centre of Rio de Janeiro	Mr. Alberto Nygaard, Transport Municipality of Rio de Janeiro
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**Technical site visit A :Operational centre of Rio de Janeiro**  
 N.B. At the end of the Technical site visits, the bus will stop at the Hotel Copacabana Suites



<b>DAY 2</b>	<b>Tuesday 24th March 2015 - Technical site visits B &amp; C and Transfer to São Paulo</b>
	Technical site visit B: BRT for large events in Rio de Janeiro
	Technical site visit C: Gondola Lift system in Rio de Janeiro (on the bus)



<b>DAY 3 –Wednesday 25th March 2015</b>		
<b>Technical site visits in São Paulo D- E</b>		
<b>Opening and keynote speech</b>		
	The importance of cooperation between Europe and Brazil on sustainable urban mobility	Dr. Augusto de Albuquerque, EU delegation to Brazil
<b>Keynote speeches</b>		<b>Moderator:</b> Mr. Alessandro Santiago, IPT
	Dr. Landgraf, IPT – José Evaldo Gonçalves, Transport municipality from São Paulo Mr. José Evaldo Gonçalves, Deputy Secretary of Transport of São Paulo Prof. Moacyr Martucci Jr, Institute Brazil-Europe Ms. Manuela Flachi, ERTICO-ITS EUROPE	
	Sustainable Urban Mobility Plans (SUMPs)	Ms. Nívea Oppermann Peixoto, EMBARQ Brazil
<b>Green Urban Mobility</b>		<b>Moderator:</b> Mr. Mats Rosenquist
	Brazilian Scenarios on Electric Vehicles	Mr. Ricardo Takahira, Magneti Marelli - ABNT
	EV and innovative clean mobility - the Twizy use case	Mr. Jean- Grebert, Renault
	e-Mobility implementation in Brazil	Ms Silvia Barcik, Renault Brazil
	Smart cities and effective mobility management solutions	Mr. Samson Tsegay, SWARCO
	Q&A: recommendations for future cooperation: the way forward	
<b>Sustainable Transport Award 2015 - Three winner Brazilian Cities</b>		<b>Moderator:</b> Mr. Alessandro Santiago, IPT
	Cycling network for bus and bikes lanes	Mr. Tadeu Leite Duarte, Traffic Engineering Company of the São Paulo City
	MOVE BRT - pedestrian-only streets and a 27-km cycling network	Mr. Ramon Victor Cesar, BH TRANS
	Q&A: recommendations for future cooperation: the way forward	
<b>Summary and conclusions by Ms. Manuela Flachi, ERTICO- ITS Europe</b>		

## Brief explanation of the technical showcases

### 1. SHOWCASE A: Centro de Operações Rio de Janeiro –



<http://www.centrodeoperacoes.rio.gov.br/institucional>

<https://www.youtube.com/watch?v=nFwbXNopnTI>

Inaugurated in December 31, 2010, in Cidade Nova, the Rio Operations Center integrates 30 entities that monitor, 24 hours a day, every day of the city. Here are integrated all stages of a crisis management from anticipation, reduction and preparedness, to the immediate response to events such as heavy rains, landslides and traffic accidents. In addition to real-time information of dealers and public bodies, the Operations Center captures images from 560 cameras installed throughout the city. All data are interconnected for viewing, monitoring, and analysis in the Control Room, on a screen of 80 square meters. In the Situation Room, equipped with another screen, video conferencing, you can communicate with the official residence of the mayor, in Gávea Small, and the headquarters of the Civil Defense. The process allows work in real-time decision-making and problem solving. How does it work? Over 400 professionals work on a three shifts to monitor the city. In the event, you can quickly activate the appropriate bodies for each type of situation.

## **2. SHOWCASE B: BRT for large events –**

<http://www.brtrio.com/conheca>

<https://www.youtube.com/watch?v=yfqkqFjj45w>

Transoeste BRT is the first express corridor operating in Rio de Janeiro. In its initial stage, it covers 56 km, connecting Alvorada terminal to Santa Cruz and Campo Grande. When completed, the Transoeste will be 63 km long and will have 57 BRT stations and 3 terminals. Its operation has already brought benefits to millions of users, once the travel time between Santa Cruz and Barra da Tijuca is down by almost 50%. The second phase, on a stretch of 7 km, will be fully operational by 2016. Transoeste will integrate with Transcarioca and Transolímpica corridors, and the subway.

## **3. SHOWCASE C: Gondola Lift system –**

<http://www.supervia.com.br/teleferico.php>

<https://www.youtube.com/watch?v=1EMO8nskyTg>

A Gondola lift built by the Leitner-Poma group now spans the Complexo do Alemão allowing residents a faster commute. It is popularly called "Bondinho do Alemão", in reference to the more famous Sugarloaf Mountain's cableway and Santa Teresa Tramway, both also called bondinho. It has become a popular destination for foreign tourists on the weekend. On July 8, 2011, SuperVia began operating the cable car, the first mass transit aerial lift passenger system in Brazil. The system consists of 152 gondolas, each of which can carry 10 passengers, eight seated and two standing, and is 3.5 km in length. The cable car is integrated into the urban rail transport system. From the first station (Bonsucesso) to last (Palmeiras) takes 16 minutes. According to the law signed by Governor Sérgio Cabral, each resident is entitled to two free tickets per day (one-way and one back).



#### **4. SHOWCASE D: Converting road space to bus and cycles lanes**

<http://www.prefeitura.sp.gov.br/cidade/secretarias/esportes/biblioteca/index.php?p=46075>

During the transfer to Brt Expresso Tiradentes, the bus will pass by different kind of road space:

Road with dedicated lane for bus

Road with preferential lane for bus

Road with permanent cycle lane

Road with temporary lane for bicycle (entertainment on Sunday and holidays)

In 2012, the amount of trips in São Paulo already exceeded 43 million, the bus modality leads with over 9 million, and the bike is the last placed with approximately 267,000 trips.

The Main initiatives involving the infrastructure for bus include 3 kinds: corridors, exclusive lanes and BRT lanes.

The main feature of the corridors is that the bus does not share space with cars.

Located in most cases on the right side of the road and easy to deploy, the preferential lanes are painted in large circulation avenues.

The Bus Rapid Transit (BRT) is also a type of bus lane. However, it is subject to specific features that ensure greater efficiency.

São Paulo massively expanded its cycling network in 2014, and implemented 320 km of exclusive bus lanes, increasing average bus speeds by 21 percent. The city is on track to have 400 km of cycle lanes implemented in 2015, part of an overall 500 km network.

#### **5. SHOWCASE E: BRT Expresso Tiradentes**

Born in Curitiba almost 40 years ago and still little used in Brazil, the Bus Rapid Transit (BRT) is also a type of bus lane. However, it is subject to specific features that ensure greater efficiency. São Paulo has only a corridor of this type, Expresso Tiradentes, that is about 10 km long. Although its implementation requires greater investment than the other options, their occupancy capacity can be compared to that of a subway.

Adopted in cities across the world, BRT is praised by experts because of the regularity, speed and comfort it offers to passengers.

The Monorail System represents the new economic investments, social development and better public transport alternative for the region because it will connect areas of high population density with important centers that concentrate a large number of jobs.

The Monorail is a public transportation system consisting of trains that travel on tires on an elevated track. The Monorail Line 15 Silver will operate with 58 trains with a transport capacity of 1.000 passengers per train, attending 501.260 passengers a day. Powered by electricity, operates without a driver and travels at a speed of up to 80km/h with an interval of 90 seconds between trains.



In total, the Monorail Line 15 Silver will be 26,6 km long, with 18 elevated stations installed in the medians of avenues. The access to stations occurs via walkways, which also serve as a pedestrian crossing the avenue.

The monorail system will provide: the same quality service offered by the underground Metro, decreased air pollution, comfort and speed, Shorter travel shifts, better integration between the districts, Improvement in traffic, Increased mobility, Expansion of investments in the region, Generation of new jobs, Generation of new poles trade and services.