
Add value to your participation in the 10th UITP Light Rail Conference!

Study tour - Light Rail in Spain

13-18 October 2010

Spain is experiencing an impressive Light Rail revival. Over the past 15 years, more than 215 km of Light Rail lines have been built in Spanish cities. With a further 150 km to be implemented by 2013, and numerous other projects in early stages of development, Spain has become a must-know destination for Light Rail professionals.

Designed as a complement to the conference, this study tour offers conference delegates the unique opportunity to visit selected flagship Light Rail developments in Spanish cities.

The study tour is limited to 25 participants and only open to UITP members attending the conference.

Participants will be able to acquire privileged local knowledge about the systems, covering their conception, financing, technologies and hands-on experience of their operation. Each city is honoured to be taking part and has allocated an expert to guide the visit.

The price of 1950 € covers all travels, meals and transfers as indicated in the programme. Places are limited. We encourage you not to miss this opportunity to see and to experience the Spanish Light Rail boom!

Optional: Tuesday 12 October 2010 Arrival and welcome

During the day: Arrival

Participants should arrange individually their international travel to Bilbao and transfer to the hotel.

Evening: Get-together dinner.

Accommodation has been arranged at the Hotel Barcelo Avenida**** (Bilbao)

Day 1: Wednesday 13 October 2010 Bilbao & Vitoria

AM: Presentation on the light rail systems in the Vasque Country at the offices of Euskotren
Technical visit of the LRT system in Bilbao-Bilbo

Lunch

PM: Coach transfer to Vitoria-Gasteiz (Total travel time: 1 hour)

Technical visit of the LRT system in Vitoria

Travel to Zaragoza by coach (Total travel time: 2.5 hours)

Dinner kindly offered by Ayuntamiento, Los Tranvías de Zaragoza & Sponsors.

Accommodation has been arranged at the Hotel Silben Reino de Aragón**** (Zaragoza)



EUSKOTREN: LR SYSTEMS IN BILBAO AND VITORIA

BILBO - BILBAO TRAMWAY

Opened on 18 December 2002 the Bilbao-Bilbo system with its metric gauge rail track serves an urban renewal area and attracts many visitors with its line passing by the fancy building of the Guggenheim Museum. The tram system was part of an ambitious project to regenerate the riverbank areas, which were historically the heart of heavy industry, and have now become the heart of the regenerated city. Patronage has increased steadily with the enlargement of the line and now the tram offers an unbeatable route for visitors who wish to visit the "New Bilbao" area



VITORIA – GASTEIZ TRAMWAY



After its inauguration on 23 December 2008, the Vitoria-Gasteiz 5km (3.1 miles) double-track metre-gauge route has become a successful means of transport in the city. Free travel was offered for 15 days after the opening for passengers with smartcards which were available for only 10 €cent.

On 10 July 2009, the service was extended with a new 2.5 km (1.6 miles) branch line. Of the total patronage, 63% use the tram every day or almost every day – a further 30% use it regularly.

The maintenance depot which houses the control centre and maintenance facilities takes full account of energy optimisation and environmental efficiency measures such as natural light, solar heating and sound insulation.

Below some recent demand data:

VITORIA - GASTEIZ

2009	2009	2010
January – June	July - December	January – April
1.675.013	3.014.269	4.689.282

Day 2: Thursday 14 October 2010 Zaragoza

AM: Presentation on the local transport system by Consorcio de Transportes del Área de Zaragoza
 Technical visit of the planned LR route and construction site.
 Lunch



PM: Visit to CAF's production site for the Urbos 3 LRV for Zaragoza
 Transfer by coach to Barcelona (Total travel time: 3.5 hours)
 Dinner kindly offered by Tramvia Metropolità

Accommodation at Hotel Barcelo Sants***** (Barcelona)

ZARAGOZA'S LR PROJECT

Having had a horse tram in 1885 and an electric one in 1902 Zaragoza's last tram ran on 23 January 1976. Due to revolutionary comeback of the tram the re-opening of the Zaragoza tram system is planned for 2011 with part 1 line running and the whole line in 2013. The tram line will be 12.8 km (8 miles) long with 25 stops and have a central stretch in the heart of the City of Zaragoza. It will take a total of 40 minutes to travel from one end to the other. Two parking depots (one on each end of the tram line) as well as a main central terminal building will be constructed.



CAF will be supplying a fleet of 21 Urbos 3 low-floor trams from its Zaragoza plant, each 33m long accommodating 200 passengers with seats for 52. They will be equipped with regenerative braking and the ACR (Acumulador de Carga Rápida) energy-storage system for catenary-free operation between the Gran Vía and La Chimenea in the city centre.

Day 3: Friday 15 October 2010 Barcelona

AM: Presentation on the local LR system by Tramvia Metropolità
Technical visit of the LR system in Barcelona.
Lunch.

PM: Travel to Valencia by coach (Total travel time: 3.5 hours)
Arrival, check in at the hotel and free time
Dinner kindly offered by FGV

Accommodation for the group has been arranged at Hotel Barcelo Valencia**** (Valencia) for two nights.

BARCELONA



The tramway returns to Barcelona



Barcelona had a tramway system over almost a century, from 1872 until 1971. The first tramway line connected the City with the municipality of Gràcia and was run by animal power, pulled by horses. Fifty years later, already with electric power, Barcelona's tramway system had one of the biggest networks in Europe. However, this mean of transport ceased to be used in Barcelona in 1971, when the last tramway line was closed. Only the "Tramvia Blau" kept working, which has become one of the city "icons".

In 1997 a provisional section was set up in the Diagonal. A year later, the Autoritat del Transport Metropolità called an international tender for the project development, construction and operation of a tramway system between the Diagonal Avenue in Barcelona and Baix Llobregat (an adjoining zone to the city of Barcelona). In April 2000, the tender was awarded to Tramvia Metropolità, and in 2004, the operation of the two tramway systems began: the Trambaix system in April, and the Trambesòs system in May.

With a valuation of 7.8 out of 10 (according to the last enquiries), the tramway is the best valued mean of transport. Tramway users in 2009 for Trambaix was 16.3 million and Trambesòs 7.6 million.

Day 4: Saturday 16 October 2010 Valencia

AM: Presentation on the local LR network by FGV
Technical visit of the system in Valencia.
Lunch

PM: Free time or optional tourism visit in Valencia.



VALENCIA

Valencia was the first Spanish city that introduced a modern street based tramway in 1994, operated as line 4 of the system. The line connects the suburban lines with high demand zones such as the Polytechnic University, the new university campus and the Malvarosa beach. Siemens built low floor trams – of a type similar to that of Lisbon's coastal tramway and Karlsruhe's city trams – serve a route



using some portions of the former regional railway's alignments, as well as Valencia's old tramway. Halfway the trams are passing 'Pont de Fusta', the old regional railway station, which is a police station and the former yard area has been transformed into a high quality public realm. Brand-new line 5 represents almost a 'real' metro, and reflects truly the name of the system which is branded as 'Metro'. New tunnels and stations are constructed for this line at the Eastern and Western side of the central city. Valencia shows a rail-based public transport system that integrates features of light rail, tram and metro and the city has a unique park in the former river bed of the Túria river under which two stations, Túria and Alameda, are situated.

Day 5: Sunday 17 October 2010 Travel & cultural activities

AM: Travel to Madrid by coach (Total travel time: 4 hours)
Check in at Hotel Melia Princesa
Lunch

PM: Free time or optional guided visit in Madrid.

Day 6: Monday 18 October 2010 Madrid

AM: Presentation on the local LR network by CRTM
Technical visit of the LR system in Madrid
Lunch

PM: Join conference participants for the technical visit of your choice



Attention! You must register to the afternoon technical visit separately, when you register to the conference. Places are limited; register early to avoid disappointment.

LIGHT RAIL IN MADRID



The Region of Madrid is situated right in the centre of the country, with some 6 million inhabitants in the metropolitan area and over 3 million inhabitants in Madrid city - Spain's capital, After the closure of the last tram line in 1972, while the system has seen its peak in 1956 with a record of 260 million passenger journeys the 2003-2007 transport infrastructures programme added a new means of transport to the already extensive public transport network: the 'Metro Ligeró', a network of modern light rail lines, operated with low-floor tramway rolling stock, running on separate right-of-way.

With its 36km (22.4 miles) in four lines and 16.6 million passengers in 2009 the light rail network contributes to achieve a modal share of 49.3% for public transport in the whole region (64% inner Madrid city).

The new four lines show the versatility of the new system and the two directions of its development: one functioning as a connection between peripheral areas and the high-capacity transport network (lines ML2 and ML3 are good examples of this) and one for the homogenous medium-density localised areas. Within this second group the solutions reached are very diverse:

ML1 in the Northern outskirts of Madrid have solved the integration with several underground sections that allows the implementation of ATP driving system in tunnel.

At the same time ML4, a modern circular tram line was built in Parla, at the Southern edge of the Madrid metropolitan area though more urban in its appearance.

This unique 1950 € comprehensive package includes:

- *All main travel and transfers within Spain (Bilbao-Vitoria-Zaragoza-Barcelona-Valencia-Madrid)*
- *Get-together dinner on 12 October 2010*
- *Accommodation from 12 to 17 October included (Accommodation in Madrid for 18 October onwards is to be arranged directly by delegates, according to conference registration conditions)*
- *Meals and visits as indicated in the programme*

Terms and conditions

- *This study tour is strictly reserved to UITP members registered to the 10th UITP Light Rail Conference in Madrid.*
- *The offer is limited to 25 persons on a "1st come – 1st served" basis.*
- *Registration exclusively via the on-line registration form at www.uitp.org/events/2010/madrid/en/study.cfm*
- *Registration will only be effective after receipt of payment*
- *Each participant is responsible for organising his/her international travel to Bilbao and back from Madrid.*
- *Cancellation policy: In case of cancellation by a confirmed participant, the following refunds are applicable, provided the cancellation is received by UITP in writing before the stated dates:*
 - *Before and on 12 September: 50% refund*
 - *Between 13 and 30 September: 25% refund*
 - *From 1 October: no refund*

If a participant cannot attend, UITP is happy to accept a substitute colleague at any time. Requests for substitutions will only be accepted by email or fax addressed to Florence Reculez (florence.reculez@uitp.org; fax: +32 2 660 1072)

- *UITP is not responsible for missed flight connections, injuries, loss or theft of personal belongings*
- *UITP strongly recommends participants to travel with a valid health insurance for Spain*

BOXED TEXT –

The study tour will be conducted in English. UITP staff will be happy to help with language difficulties, but participants should feel comfortable conversing in English.