

# EMT consulting service





# **ABOUT US**

**EMT Madrid** is the public company of the City of Madrid, with **75 years of experience in transport and mobility management providing service to the city, its citizens and all those who come to visit us. Our professionals have first-hand experience with the evolution of the needs and responses faced in terms of mobility.** 

At **EMT Madrid**, we offer a **wide variety of services and assistance**, both to local governments and to transport operators, in developing solutions to their urban mobility challenges. Our **commitment to sustainable mobility** is the focus whenever our clients share their challenges with EMT.







# **HOW WE CAN HELP**

- 1. Urban transport management
- 2. Definition of needs and bus maintenance
- 3. Technology and applications
- 4. Mobility services
- 5. Infrastructure design
- 6. CSR and Accessibility
- 7. Business management
- 8. Human Resources



# 1. URBAN TRANSPORT MANAGEMENT

The efficient management of a city's bus transport system is a complex process that requires great precision. Sub-processes such as operational planning, the assignment and management of the personnel required for the deployment and operation of the bus network, the maintenance of said network or the methodology in resolving daily incidents are all elements that must run like clockwork to be able to offer quality services. To help, EMT offers the following services:

- → Technical assistance in service operations management.
- → Technical assistance in the design or revision of the service operations model.
- → Technical assistance in managing the flow of communications with users.





# 2. DEFINITION OF NEEDS AND BUS MAINTENANCE

The process of choosing which technology and fuel to use in urban transport service vehicles is a critical decision with many repercussions both internally and externally. There are many possibilities, each with their own advantages and disadvantages. Carrying out studies on the most suitable systems for each particular situation, and having tailor-made maintenance plans, helps transport companies have the most appropriate resources for their operations, thus minimizing potential day-to-day problems. To help, EMT offers the following services:

- → Technical assistance in the electrification of transport system operations.
- → Technical assistance in the installation of a clean fleet (CNG, H2, electric and hybrid).
- → Technical assistance in the vehicle acquisition process and/or defining fleet requirements.
- → Technical assistance in the engineering, automation and design of maintenance plans.

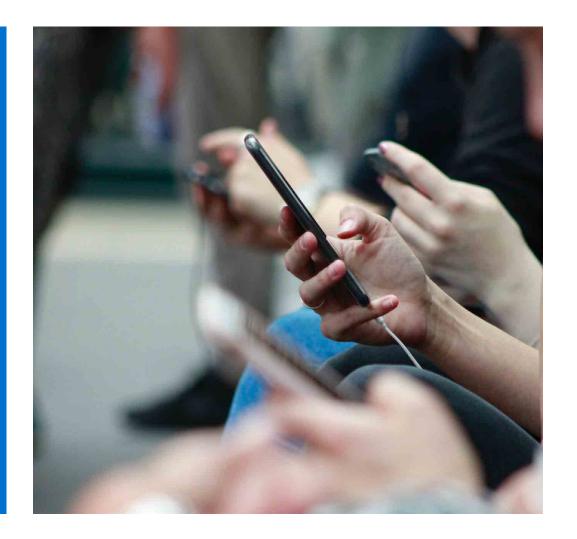




# 3. TECHNOLOGY AND APPLICATIONS

Being up-to-date with technological advances by investing and researching improvements that may help the user perceive their experience as being up-to-date. The urban bus service has evolved, leaving behind the model in which vehicles simply moved from one point to another. The user experience now includes additional attractive services. Offering real-time information on the arrival of vehicles, payment methods, incident processing via mobile apps, WIFI connections on the bus itself, video security systems, updated route information on screens... These are just some of the factors that provide advantages and comfort to users during their trip and can make them loyal customers. To help, EMT offers the following services:

- → Technical assistance in the design and/or implementation of payment systems.
- → Technical assistance in the design and/or implementation of ITS technologies.
- → Technical assistance in the design and/or implementation of "MaaS" systems.
- $\Rightarrow$  Technical assistance in the design and/or development of service information applications.





# 4. MOBILITY SERVICES

Urban mobility has evolved over the last decade with the entry of services never seen before, such as public bicycle services. Assistance or help in the design of these systems make it possible to customise their development, reducing the usual problems that arise when implementing these systems, which can generate serious obstacles during their management. Moreover, in terms of parking management, the absence of adequate up-to-date technology or an adequate management system reduces potential income and increases costs could be reduced or even eliminated with proper experience. In this area, EMT offers the following solutions:

- → Technical assistance in the design and/or management of public bicycle systems operations.
- → Technical assistance in the direct management of mobility systems.
- → Technical assistance in urban parking operations management.





# 5. INFRASTRUCTURE DESIGN

Having adequate and personalized facilities is essential for the efficient management of any service, not only those oriented towards mobility. With studies on potential improvements in existing facilities, as well as proposals for improvements or comprehensive designs for new facilities, we can help allocate resources to non-priority tasks, thus achieving greater management efficiency. To help, EMT offers the following services:

- → Technical assistance in the design and/or management of fuel supply and electrical charging facilities.
- → Technical assistance in the design and/or management of operations centres, logistics HUBs and parking lots.
- → Technical assistance in the design and/or management of facilities maintenance planning.





# 6. ESG

In addition to its daily operations, EMT has a responsibility to society, and is collaborating with a multitude of entities through its ESG work. Moreover, accessibility is a concept that must include the idea of universality. Therefore, it is important that our potential users perceive that our services are meant for everyone, whatever their situation. We can help with this change through the development of sensitivity programs or in the evaluation and redesign of those elements that require changes in regard to universal accessibility, for which we offer technical assistance and advisement:

- → Technical assistance in the design and/or implementation of ESG agreements and/or actions.
- → Technical assistance in the design and/or implementation of universal accessibility and sensitivity programs.
- → Technical assistance in the design and/or revision of urban mobility accessibility elements.

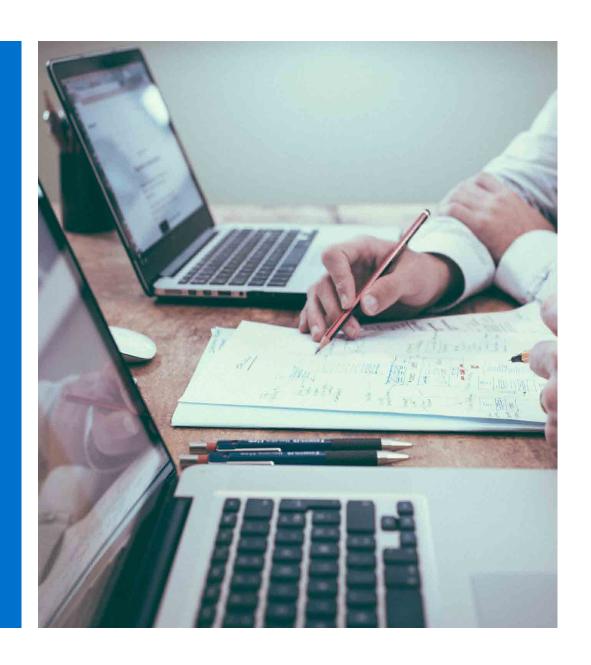




# 7. STRATEGIC & BUSINESS MANAGEMENT

The knowledge accumulated in managing tasks such as process optimization, the analysis of results, the implementation of quality systems or the presentation of offers to tenders have generated a considerable success rate. The EMT team has extensive experience in the design and methodologies for the development and execution of Strategic plans, supported by operational and financial forecasts. Many companies are seeking our advisory and assistance services:

- → Technical assistance in engineering processes and the implementation of quality systems: quality, environmental management and occupational risk prevention.
- → Technical assistance in the preparation of tender offers..
- → Technical assistance in transport systems audits, the preparation of audit plans and/or the completion of audits.
- → Technical assistance in the design and/or revision of cost accounting and results analysis models.
- → Technical assistance in the design and/or implementation of strategic plans.
- → Technical assistance in preparing calls for applications for aid and subsidies.





# 8. HUMAN RESOURCES

All public transport company employees require continuous training through training plans that make it possible to educate the staff and assist in the staff recycling process. The elements required for these tasks are very expensive and often use resources that would be required by other areas of the company. Being able to count on advice for these plans, as well as facilities and resources specifically designed for this purpose (simulators), allows the efficient use of the company's resources and helps reduce the risk of outdated staff and avoids more severe consequences, according to the specific local regulations. To help, EMT offers the following services:

- → Technical and management personnel training services.
- → Personnel training services through the use of simulation technologies.
- → Technical assistance in the design and/or development of mobility and maintenance personnel hiring plans.









# **EMT** by the **NUMBERS**\*



410,000 employees



**229** lines, a network of 4,249 km., **11,271** bus stops



2,215 buses (100% green)
5 operations centers



374 million passengers in 2025\* (476 million passengers in 2024)



1,6 million travellers per workday



860 million € Budget 2025



**42,554** procedures in 2025\* (56,700 procedures in 2024) **65** tow trucks in **7** depots



**7,735** e-bikes, 630 stations **9,830,006** trips in 2025\* (9,945,558 trips in 2024)



80 cable-car cabins w/maximum capacity of 1,200 passengers/hour



12,866 spaces, 28 parking lots 3 mobility HUB





# 75 YEARS OF EXPERIENCE

On November 12, 1947, the first operations of the Municipal Transport Company of Madrid began, created by the City Council to regulate surface transport. Since then, the city, its history, its development and its urban landscape have become intimately linked to the history of EMT.

**EMT** has become a world renowned mobility operator and a reference in the management and operation of urban transport. From trams and trolleys to the most modern electric buses and 229 lines in the city, EMT is a company that has grown with the values that define it: sustainability, innovation, accessibility, and a vocation for service.



# 75 YEARS OF EXPERIENCE

- 1947 EMT was created to unify urban land transport.
  - **1966** Trolley circulation is suppressed.
  - **1972** The tram service disappears.
- 1979 The 10-trip bus pass is created.
- **1985** Madrid and EMT join the Regional Transport Consortium.
- 1994 First natural gas bus. First low-floor bus.
- First experimental project with hydrogen fuel.
- 2005 Mobile Information System (SMS).
- 2007 Adopted contactless BIT (Smart Transport Ticket).
  - 2009 First tests with hybrid buses. Bus stop messenger panels.
- **2010** First CNG dispensers. Onboard WIFI. EMT application for iPhone. Opening of Sanchinarro operations centre.



# 75 YEARS OF EXPERIENCE

- The first hybrid CNG and electric bus.
- 2014 EMT absorbs Madrid Movilidad: managing parking lots and tow-trucks.
- 2015 USB chargers were installed and granting access to double-strollers.
- 2016 EMT starts managing Bicimad. First 100% electric standard bus.
- **2017** Bicipark comes into service.
- **2018** EMT starts managing Teleférico.
- 2019 Pay-by-card or mobile device installed on whole fleet.
  - 2020 EMT Launches Madrid Mobility 360 application. First ZERO-ZERO line.
- 2021 Reached first 15 100%-electric lines.
- **2022** End of diesel buses in circulation.
- 2023 Renovation and enlargement of Bicimad (21 districts). 28 fully electrified bus lines.
  - **2024** Green Hydrogen plant operational. H2 buses in operation.



# **SUCCESS CASES**

### Oviedo

ALSA Advice on infrastructure and Zero vehicles

Gipúzcoa

**EMV** 

Assistance with new validation and payment methods

### Zaragoza

Redesign of the bus route network

### Madrid

### **CAR PARKS**

Technical review of the condition of municipal car parks Technical assistance for the park and ride programme

### NATURGY HYBRID-GAS TECHNOLOGY

Operating cost study for different means of propulsion

### ARRIVA SPAIN HOLDING

Technical assistance for the electrification and gas conversion of Operations Centres

### ALSA

Advice on obtaining subsidies and funds

### Pamplona

### SAIE PAMPLONA

Technological upgrade of onboard systems in buses

### **OPERATIONS CENTRE**

Consultancy on the design of the operating support system and alternatives for the new operations centres

### **RUIZ GROUP**

Assistance with public transport tendering

### Valencia

### PLAZA DE BRUJAS VALENCIA

Technical assistance in municipal car park management

### Ibiza 👝

### ALSA

Advice on infrastructure and Zero vehicles

### **Tenerife**

Planning of services and tool analysis



# **SUCCESS CASES**

### Guadalajara, México

### **E-MOV ELECTRIFICATION 1**

Development of an operating model for an electric line

### **Mexico City, Mexico**

### **CONSULTANCY AXIS 8 SOUTH MEXICO CITY**

Planning and operational design of a new electric route

### C40 CITIES - ELECTRIC UNIT ROUTE PLANNING

Routing study for electric units (bus and trolleybus)

### **Costa Rica**

### TAIEX-VIRTUAL EXPERT MISSION

Consultancy on transport and COVID-19

### Lima, Perú

### **TRANSVIAL**

Management of the operation of the Lima BRT within the COSAC system

### **IDOM**

Technical assistance for operational design BRT Lima

### Santo Domingo, Dominican Republic

### FIIAPP

Consultancy on increasing electric vehicles in public fleets, strategy design and pilot project for electric buses in public and private entity fleets

Advice on fleet maintenance and renewal

### Cartagena, Colombia

### TRANSCARIBE

Consultancy services to define and implement improvements in public service

### Bogotá, Colombia

### PUBLIC TRANSPORT OPERATOR

Consultancy services to define the operational and organisational set-up of a new public operator

### TRANSMILENIO

Technical assistance in operations.

### La Paz, Bolivia

### **EL ALTO**

Consultancy services for the implementation of the Integrated Mass Transit System

### Montevideo, Uruguay

### **APP MONTEVIDEO**

Bus occupancy management via App and stereoscopic sensors

### **Buenos Aires, Argentina**

### IDOM WORKSHOP

Fleet electrification workshop





# **SUCCESS CASES**

### Kyzylorda, Kazajistán

### **DEPOT AND BUSES**

Design of depots, workshops, refuelling stations and definition of bus technical specifications for fleet change

### Hanoi, Vietnam

### DEPOT AND BUSES

Design of workshops and definition of bus technical specifications

### Da Nang, Vietnam

### **DEPOT AND BUSES**

Design of workshops and definition of bus technical specifications











# WHO WE WORK WITH

# European Projects the EMT has participated in as a partner













Hyfleet:CUTE

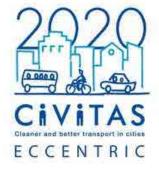
Momentum

iMove

Show

Lead

Scale Up



solutions









Eccentric

Solutions Plus

Ikaas

Frevue

Move Us

Cosmos



# WHO WE WORK WITH

# Organisations and associations the EMT participates in









UITP

Polis

**Euro Cities** 

International Transport Forum









Urban Mobility European Invest Bank Civitas Civinet **ATUC** 

# **EMT** consulting service



# WHO WE WORK WITH

# Companies we have worked with











**IDOM** 

**Arriva** 

**Transvial** 

**TRN Taryet** 

CPS
Infraestructuras
Movilidad y Medio
Ambiente SL









g-advisory

Naturgy

Ayto. de Valencia Titsa

Mancomunidad de Pamplona

G-advisory del Grupo Garrigues









**KPMG** 

Grupo Ruiz

Stadtwerke Bonn Verkehrs-GmbH

DAN Bus Company Fundación para la Internacionalización de las Administraciones Públicas







# WHERE WE ARE

For any questions or for more information on the services provided by EMT, contact us at the following email address and we'll be available to consider your particular situation to find the best results possible:

consultoria@emtmadrid.es



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