

INDIRECT MANAGEMENT OF BUS TRANSPORT SERVICES IN THE METROPOLITAN AREA OF BARCELONA



CONTEXT



TERRITORY

CATALONIA

7,5
million people

32.108
km²

236
Inhabitants per km²

METROPOLITAN
AREA OF
BARCELONA

3.2 (42.7%)
million people

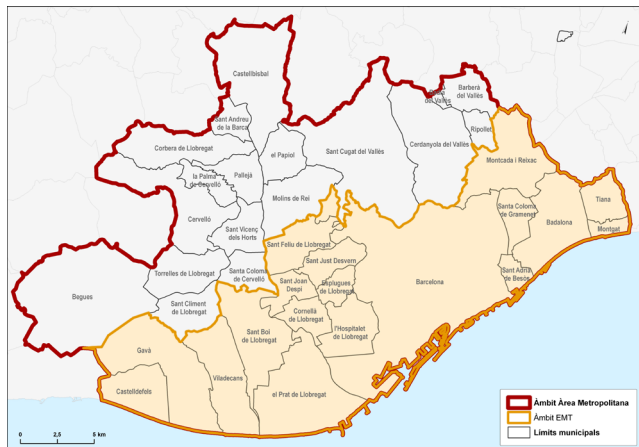
636 (1.9%)
km²

5.093
Inhabitants per km²

INSTITUTION



- Local public administration
- Established through the Law 31/2010 of the Catalan Parliament
- Governed by a Metropolitan Council with representation of 36 municipalities



COMPETENCIES



-  Underground public transport
-  Collective urban public transport on surface
-  Regulation of the taxi service
-  Traffic management in the basic metropolitan road network
-  Promotion of sustainable mobility
-  Planning and management of the culture and tourism transportation
-  Approval of the Metropolitan Urban Mobility Plan

PUBLIC TRANSPORT PROVISION MODELS



PROVISION MODELS



Collective urban
public transport
on surface

Direct Management

Public company



Transports Metropolitans
de Barcelona

Indirect Management

Private companies








- No tendering process
- Public company
- AMB owns 100% of shares
- High degree of autonomy

- Awarded through a tendering process
- Publicity and competition principles
- Private companies
- AMB carries out the whole process of planning, contracting and supervising the service

MAGNITUDES

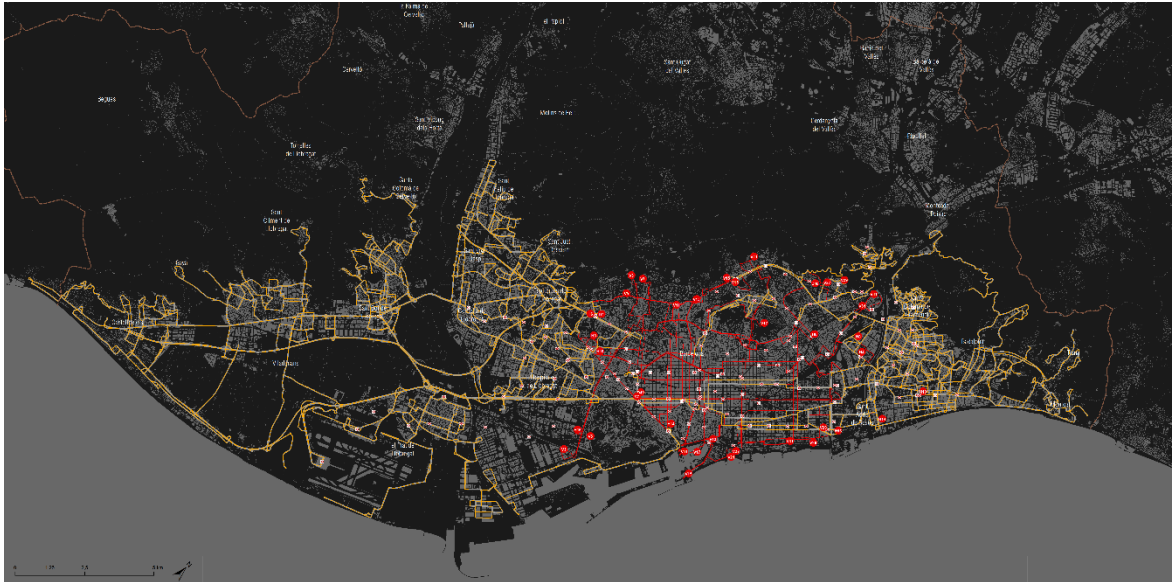
2017

Data

Bus Network		 AMB Bus Metropolitana	 AMB Nitbus	 AMB Aerobús	 AMB Barcelona City Tour	Total
Number of lines	98	86	20	2	6	212
Network length (km)	1.792	1.898	807	65	121	4.682
Trail length (M km Useful year)	39,0	27,9	5,5	4,2	2,8	79
Buses fleet	1.008	511	125	30	117	1.791
Average age (years)	9,85	8,10	9,62	8,30	8,64	9,28
Adapted buses	100%	100%	100%	100%	100%	100%
Year passengers (2017, in M)	196.972.026	73.124.730	7.990.551	5.621.684	8.066.094	291.775.085
Stops						4.575



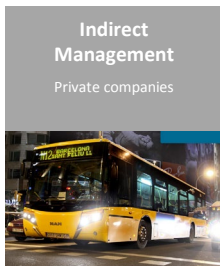
SCOPE



INDIRECT MANAGEMENT



CONTRACTUAL TYPOLOGIES



SERVICE CONTRACTS

- ◆ AMB : **Bus Metropolità**
- ◆ AMB : **Nitbus**

- Regular services
- AMB subsidizes the deficit
- Contribution regulated by contract
- Full risk on cost and partially on revenues

CONCESSION CONTRACTS

- ◆ AMB : **Aerobús**
- ◆ AMB : **Barcelona City Tour**

- Specific transport services
- No deficit
- Payment of a fee to the AMB
- Full risk on cost and revenues

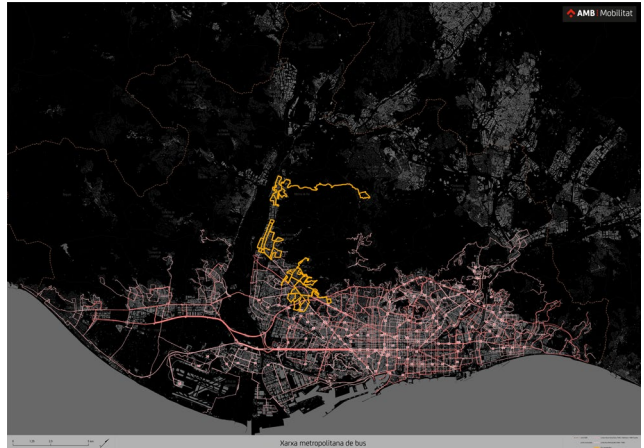
Maximum contract length: 10 years (regulation 1370/2007)

SERVICE CONTRACT: THE LAURÈA MIRÓ CASE



Background

- **Heterogeneous service: 11 lines in operation** with different basic characteristics (geographical area, length, demand, speed)
- **Territorial scope: 5 municipalities** and their connections with Barcelona (Esplugues de Llobregat, Sant Just Desvern, Sant Feliu de Llobregat and Molins de Rei)
- In 2018 the Laureà Miró service transported **2,029,205 passengers** with a yearly output of 884,651 km

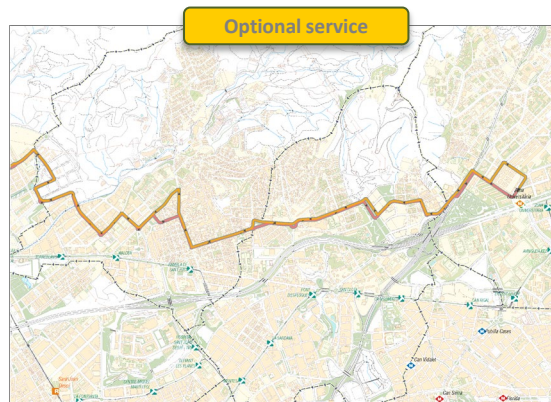
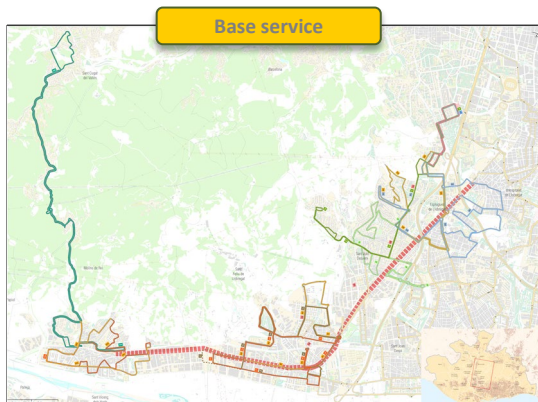


In May 2018 a new tendering process was launched:

- **Service contract** according to the new Public Sector Procurement Act
- **7 years** contract, with a potential extension for a maximum period of **3 years**

Service definition

- **Base service:** 960.536 km / year. Routes, stops, calendar, number of expeditions and frequencies are defined in the ToR.
- **Base service variations:** up to +/- 10% of the contract price (not considered contract modification)
- **Optional service:** new line (L30). Up to 287.853 km / year and + 7 vehicles. Cap at 20% of the contract price

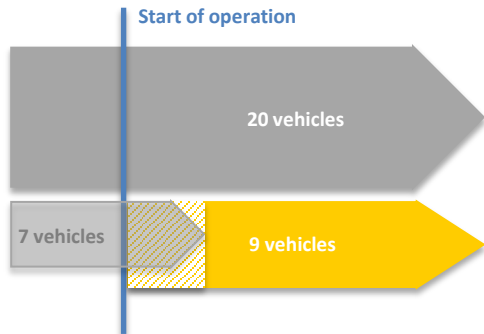


Fleet

- **Minimum fleet requirement:** 29 vehicles
- **Subrogated fleet:** 20 vehicles + 7 vehicles (provisional)
- **New fleet to be provided by the successful bidder:** 9 vehicles, according to technical specs included in ToR (hybrid)
- **Transition period** (provisional vehicles): 9 months from start of operation

Additional obligations:

- **Ascription to the contract**
- **“Half-life adequacy”** > 7 years old
- **Fleet renewal** < 14 years old
- Fleet acquisition according to **public procurement rules** (Law 31/2007)
- When finalizing the contract, all vehicles **will revert to AMB**



Equipment

- **On board equipment** is mandatory by contract and must be provided by the successful bidder:
 - **GPS + Intelligent Transportation Management System (ITMS)**
 - **Information screens on board**
 - **Sales and validation system**
 - New **video surveillance system**
 - New **passenger counting system**
- When finalizing the contract, all on board equipment **will revert to AMB**
- The successful bidder provides **other auxiliary installations** (depots, offices...) **and vehicles**, without reversion obligations.
- The successful bidder must provide **toilet facilities** for drivers at line ends.



Other obligations

The successful bidder:

- Is responsible for **information on all stops**, as well as for **maintenance and renewal of infrastructure** on some stops.
- Must **subrogate the current staff**. The reduction in number and characteristic of current staff will be considered a **breach of contract**.
- Must join the **Integrated Fare system (ATM)**
- Is responsible for **information and user attention** through different channels.
- Must implement different plans: **Promotion Plan, Training Plan, Environmental Plan, Service supervision Plan**.
- Has to deliver **periodic reports to AMB** and allow direct access to ITMS
- Has to keep a **separate accounting** for the service and carry yearly financial **audits**.



Quality indicators

The contract enforces several quality indicators:



- **Punctuality Index (IP):** A bus is punctual at one stop if the difference between scheduled time and real time is less than 3 to 5 minutes. It is obtained from data provided by the transportation management system.



- **Bus vehicle quality Index (IQA):** Evaluates on-board information, maintenance, cleaning, security and customer support. It is obtained with the technique of mystery shopping.



- **Bus stop quality index (IQP):** Evaluates the quality of the stops (information, maintenance and cleaning). It is obtained from fieldwork.



- **Dynamic information Index (IQI):** Evaluates the quality of 'on time' information. It is obtained from data provided by the transportation management system.



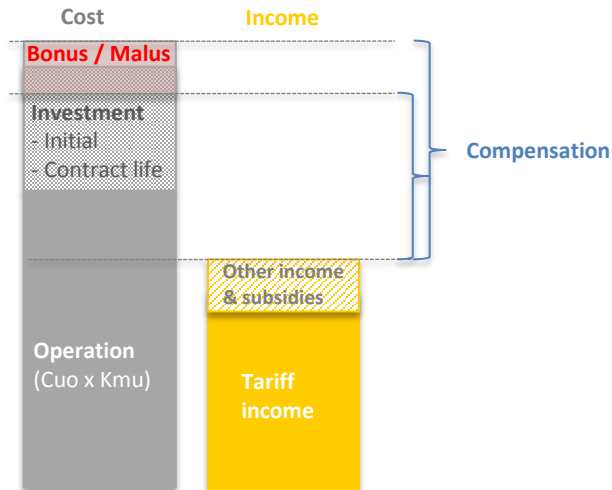
- **Claims response time Index (IQR):** Measures the % of operator answers to complaints within 10 days.



- **Customer Satisfaction Index (ISC):** Evaluates bus users satisfaction. It is obtained from surveys to the users, which evaluates the importance and satisfaction of the most important items of the service.

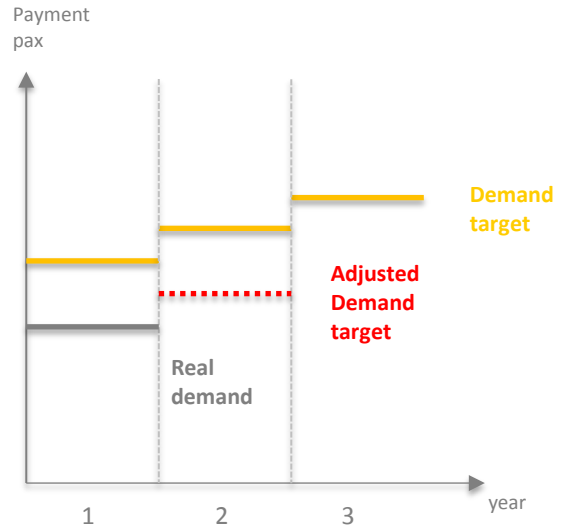
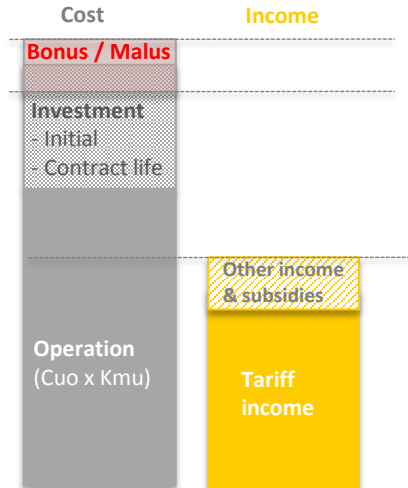
Economic regime

- Net cost with reduced demand risk



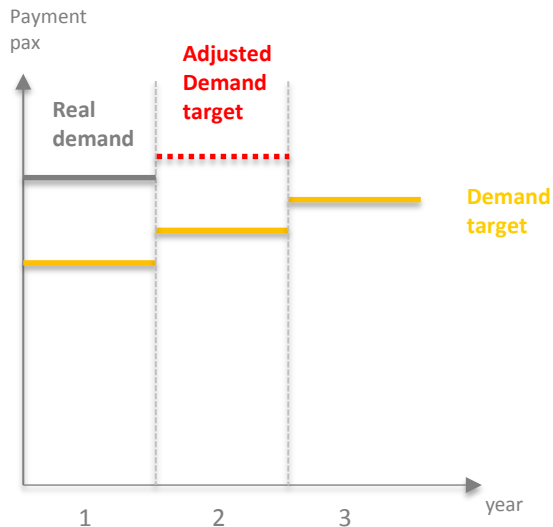
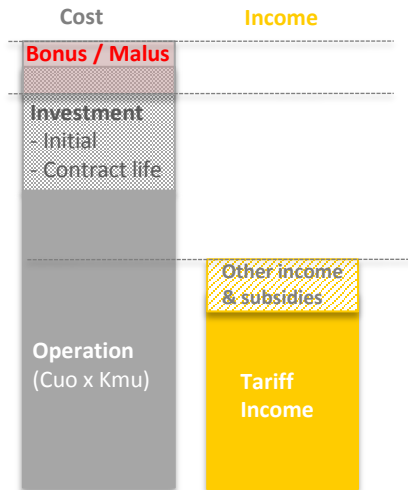
Economic regime

- Net cost with reduced demand risk



Economic regime

- Net cost with reduced demand risk



Tendering process

- In October 2016 a **prior information notice** was published in UE Official Journal.
- In May 2018 **the tendering notice was launched**
- The new service is to start in **March 2019**
- Awarding criteria:



Criterion	Weight
1. Non-formula criteria	40
1.1 Service operation	15
1.2. Service quality	20
1.3. User relationship	5
2. Formula criteria	60
2.1. Unitary Cost	38
2.2. Payment passenger target	11
2.3. Environmental criterion	11
Total	100

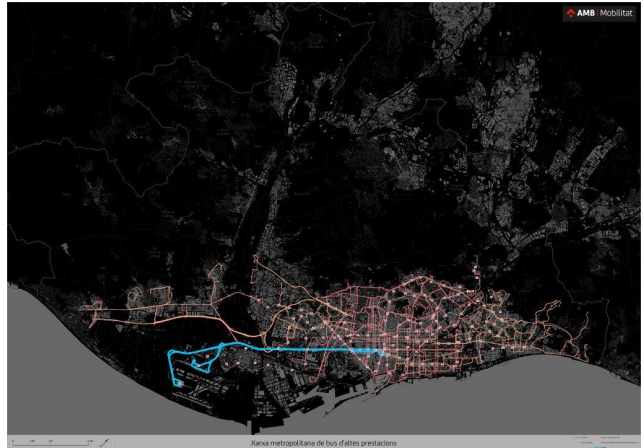
CONCESSION CONTRACT: THE AEROBUS CASE



Background

Since 2009, AMB provides a shuttle bus service between Barcelona and the Prat de Llobregat Airport:

- **High frequency** express service
- Working **365 days a year**
- **Specifically tailored** to the Airport's demand (information, luggage, seated passengers)
- **Two lines** in operation: A1 and A2 (Plaça Catalunya - Terminals T1 and T2)
- By 2018 the Aerobús service transported **5,861,630 passengers** with a yearly output of **4,307,510 km**

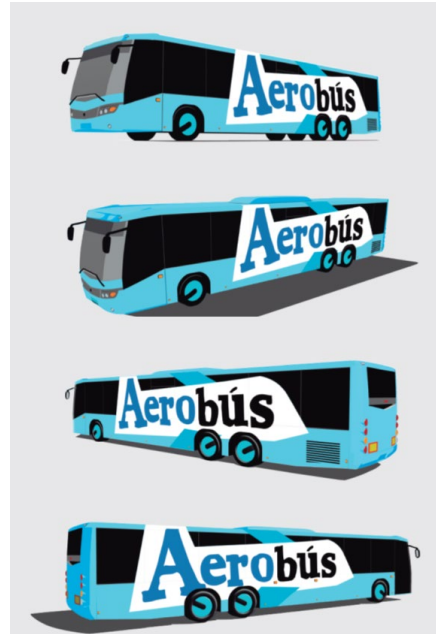


In November 2017 a **new tendering process** was launched:

- Public service management contract, in the form of **concession** (Public Sector Procurement Act)
- **6 years** contract, with a potential extension for a maximum period of **2 years**

Fleet

- The successful bidder will provide the vehicles needed for the service, with a **minimum number of 30 new vehicles** at the time of starting the service
- When finalizing the contract, the vehicles **will revert to AMB**
- The vehicles will have similar characteristics to the current ones: a length of **15 m approx.**, A minimum of 45 seats and space for a wheelchair.
- The vehicles may be **hybrids (diesel / electric) or electric**
- The vehicles have to go through a “**Half-life adequacy**” > 7 years old



Equipment

- **On board equipment** is mandatory by contract and must be provided by the successful bidder:
 - **GPS + Intelligent Transportation Management System (ITMS)**
 - **Information screens on board**
 - **Sales and access control system**, including on-board payment with contactless devices (credit card and / or mobile phone)
 - New **video surveillance system**
 - New **passenger counting system**
- When finalizing the contract, all on board equipment **will revert to AMB**
- The successful bidder can provide **additional equipment**.
- In order to facilitate the operation, the successful bidder must have **a depot in the metropolitan area** (radius <20 km)



Other obligations

The successful bidder:

- Is responsible **for information, maintenance and renewal of infrastructure** on all stops.
- Must **subrogate the current staff**. The reduction in number and characteristic of current staff will be considered **a breach of contract**.
- The successful bidder will be responsible for the **distribution and commercialization of Aerobus tickets** through different channels and for the information and attention to the user.
- To promote the service, the successful bidder will have to develop a **Promotion Plan**, renew the image of the service, develop a Web and App of the service and **rent advertising spaces** at the Airport.
- Must implement different plans: **Training Plan, Environmental Plan, Service supervision Plan**.
- Has to deliver **periodic reports to AMB** and allow direct access to ITMS
- Has to keep a **separate accounting** for the service and carry yearly financial and ticket **audits**.



Quality indicators

The contract enforces several general quality indicators:

- **Punctuality** Index (IP)
- **Bus vehicle quality** Index (IQA)
- **Dynamic information** Index (IQI)
- **Claims response time** Index (IQR)
- **Customer Satisfaction** Index (ISC)

Specific quality indicators for the Aerobus contract are:

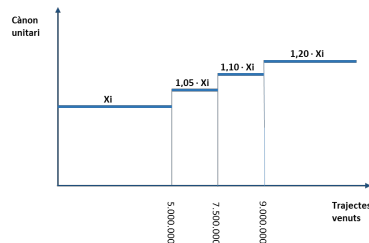
- **Queue** Index (IQC): Measures the length of queues at terminal stops
- **Passenger occupancy** Index (IQV): Measures percentage of expeditions with all travelers seated
- **Service regularity** Index (IQE): Measures percentage of planned expeditions effectively performed.



Economic regime

- The provision of the service is at the **full risk** of the successful bidder
- The **evolution of service rates will be determined by AMB** and may not be less than the evolution of certain reference titles (title integrated ATM T-10 of zone 1)
- **The successful bidder will pay AMB a fee for every ticket sold**

Trajectes venuts en l'exercici (Y)	Valor del cànon corresponent a l'exercici
$0 < Y \leq 5.000.000$	$Y * Xi$
$5.000.000 < Y \leq 7.500.000$	$(1,05 * Y - 250.000) * Xi$
$7.500.000 < Y \leq 9.000.000$	$(1,10 * Y - 625.000) * Xi$
$Y > 9.000.000$	$(1,20 * Y - 1.525.000) * Xi$



- The total fee due for a given year will be increased or reduced according to the **bonus / malus system**
- The only **revision of the financial balance** of the concession set forth in the contract is the result of the reduction of demand as a consequence of the future railway connection to the airport (loss of more than 25%).

Tendering process

- In July 2016 a **prior information notice** was published in UE Official Journal.
- In November 2017 **the tendering notice was launched**
- In October 2018 **the preferred bidder** was identified
- Awarding criteria:



Criterion	Weight
1. Non-formula criteria	49
1.1 Service operation	22
1.2. Service quality	15
1.3. User relationship	12
2. Formula criteria	51
2.1. Fee for AMB	51
Total	100

Thank you for your attention



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