



**LAUNCH**

# Public Tender for the concession for the Use of Roads 2023

**Paola Tapia Salas**

CEO DTPM

January 2024

# Context of the Public Transport System

**36**

Municipalities

**7,5 MM**

Inhabitants

**396**

Bus Routes

**9**

Bus  
Operators

**6.700**

Buses

**12.000**

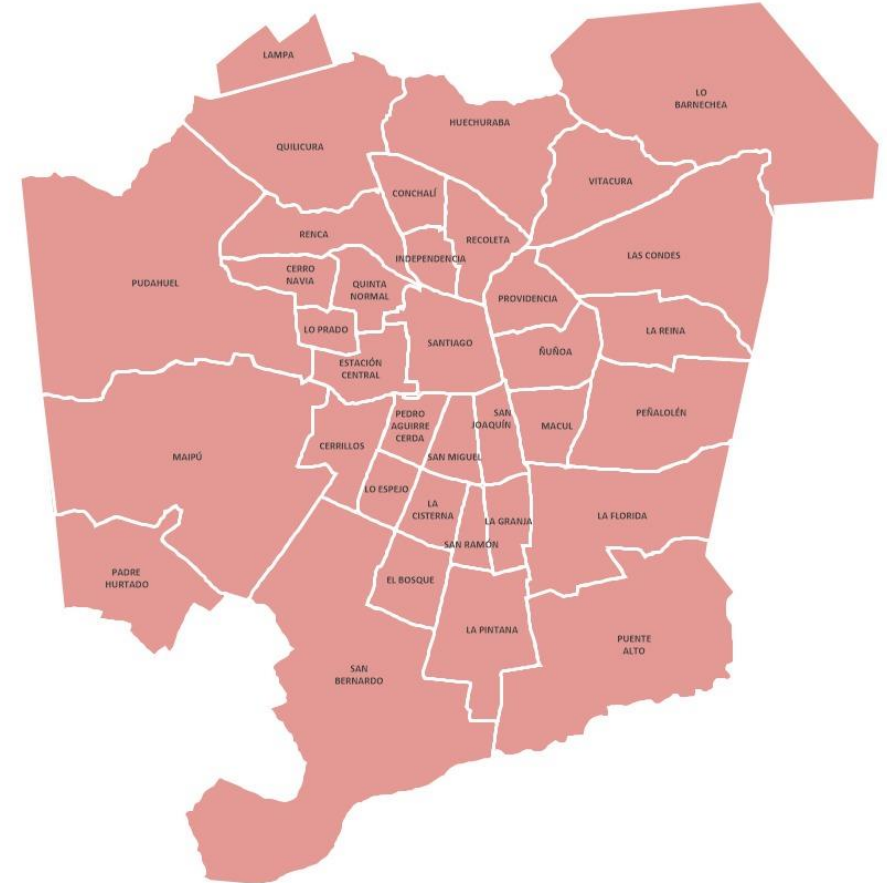
Bus Stop

**149**

Km Subway

**23**

Kms Suburban Rail



# Numbers of the 2023 tender

**3,5 Millions**



**Citizens**

**30%**

System Routes

**121**

Tender Routes

**5**

Units of service

**+20**

Municipalities  
Benefited

**2.100**

Buses

**23**

Depots

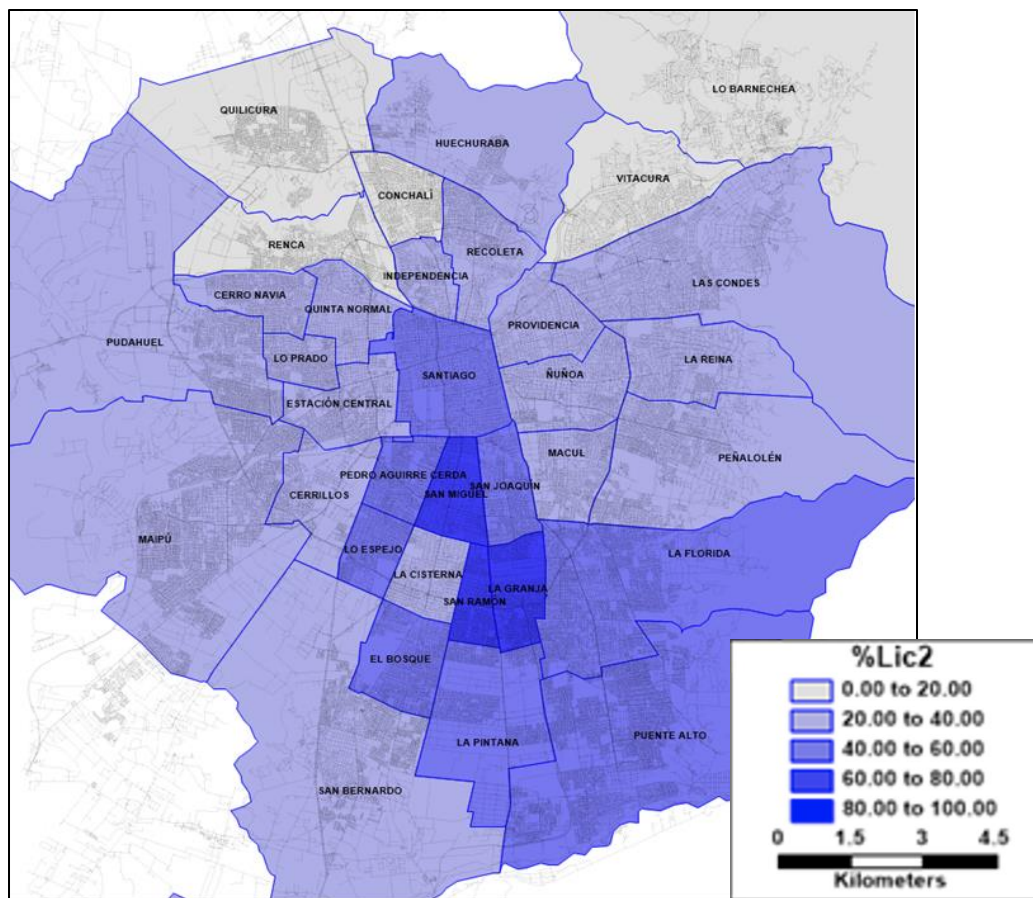
**5.600**

Bus Stop

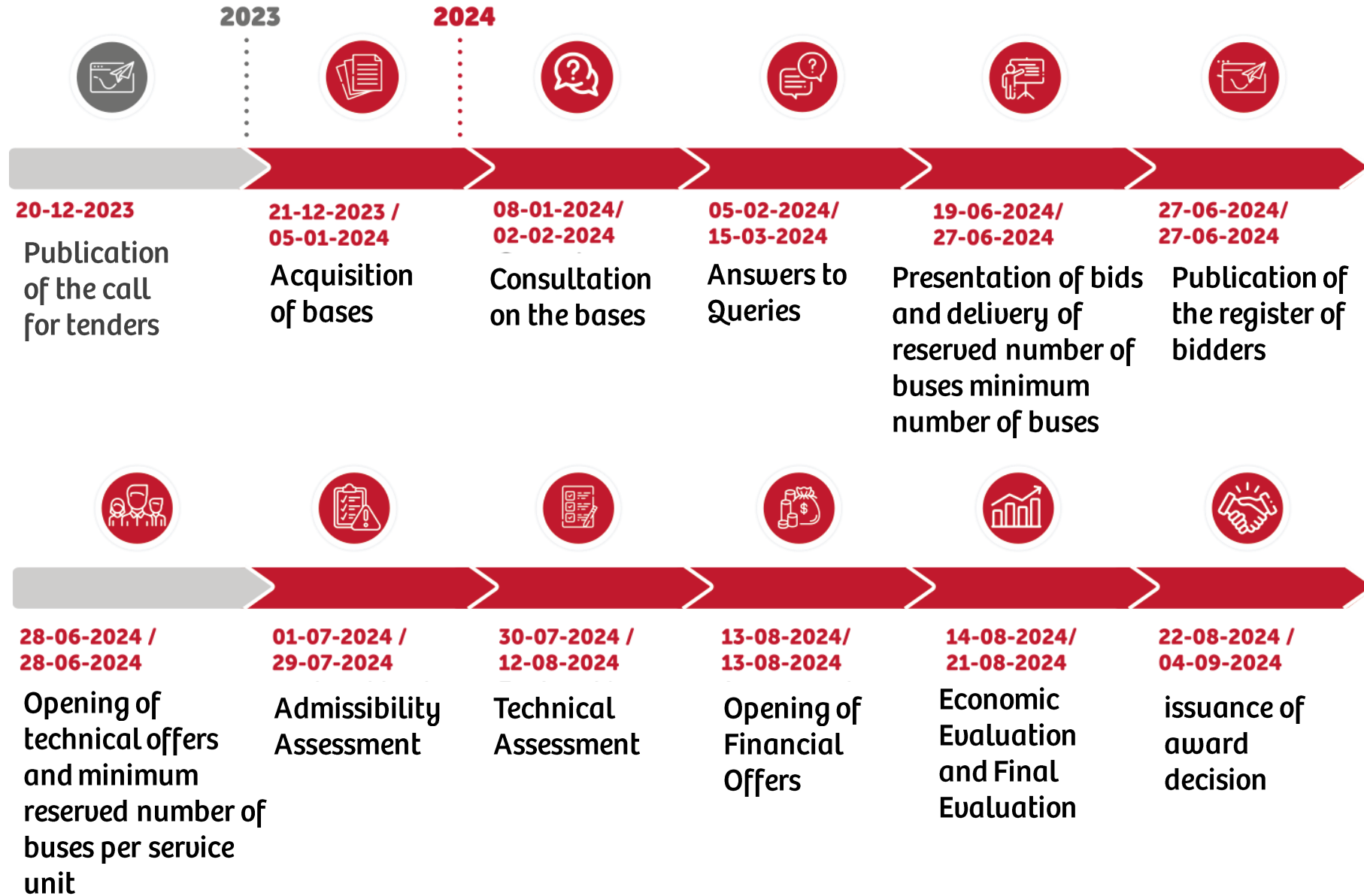
**13**

Municipalities with at  
least 40% of their routes  
tendered

# Where will the tender be implemented?



# Tender Schedule



# Guiding principles of the concession contract

Coordinating role  
of the System

Quality of  
Services

Active  
involvement of  
the Dealer

Flexibility and  
Integration

System  
Interrelationship

Collaboration and  
communication

Continuity of  
System services

Responsible  
operation of the  
company

# Guiding principles of the concession contract

Prevailing  
Condition

Active control of  
fare evasion

Regulated Market

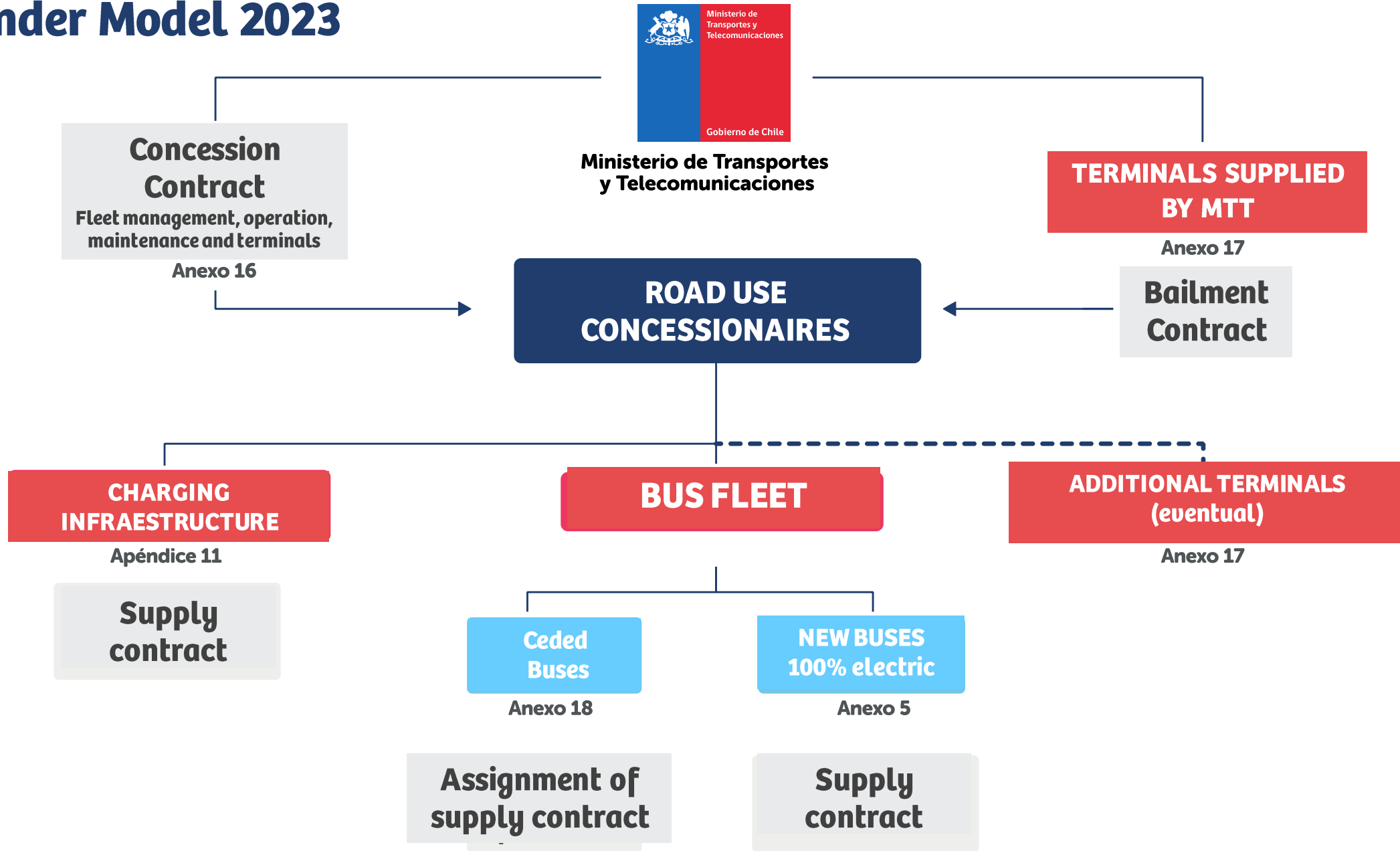
Anti-corruption  
and respect for  
free competition

Gender Equality

Social Inclusion

Road Safety

# Tender Model 2023





# Regulatory framework tendering

## Act 20.378

"Creates a national subsidy for paid public passenger transport"

- Permanente source of funding.
- The amount of the subsidy is transferred fortnightly as reported and projected by the Ministry.
- User fees are set by a panel of experts.

## Act 18.059

"Assigns the Ministry of Transport and Telecommunications the character of national traffic governing body and assigns it powers".

- MTT is the national regulatory body responsible for proposing traffic and transport policies.

## Act 18.696

"Amends Article 6 of Law No. 18.502, authorises the importation of vehicles and establishes rules on passenger transport".

- Ministry of Transport intervenes and regulates public transport with wide-ranging powers
- Creates assets related to the concession.

# Concession Contracts

Anexo N°16 of the bases, regulates its validity, the principles that inspire it, the rights and obligations of the Concessionaire, the economic conditions of contracting, among others.



Review body	Review result	Concession period
72° month	Non-compliance with requirements	7 years
	Compliance with requirements	10 years
108° month	Non-compliance with requirements	10 years
	Compliance with requirements	Up to 14 years

# Fleet Provision Contract

## CONCEPT AND SCOPE

Contracts submitted by the Bus Companies, reviewed and approved by the Ministry, on assets related to the concession.

## AVAILABILITY AND FINANCING

The concessionaires' obligations regarding the provision of buses ensure their availability and permanence in the system by financially supporting the providers.

## PAYMENT

120 equal and successive monthly instalments for the use of the buses.

## AFFECTED PROPERTY TO THE CONCESSION

They are immediately transferred to new concessionaires or road operators, thus ensuring the payment of the instalment to the financier of the buses.

# Attributions

## Ministry

1. Regulate
2. Define standard
3. Supervision
4. Apply discounts and penalties
5. Other Powers

## Concession contract administrator

1. Technical and administrative supervision
2. Verify compliance with service levels
3. Giving instructions
4. Other duties.

# RIGHTS OF THE CONCESSIONAIRE



Roads use



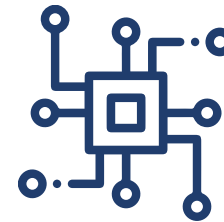
To exploit economically the activity



To receive and dispose of of income



Related activities



Proposals for optimisation

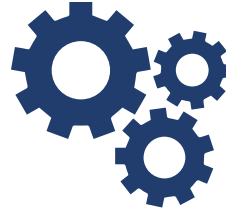


Others Rights

# Obligations of the Concessionaire



To provide urban public paid passenger transport service with quality standards.



**Operation**



**Quality**



**Continuity**



**Security**



**Staff:  
Gender Quota**

# Concessions in competition

5 Service Units: 14, 15, 16, 17 and 18

# Service Units

## Reference maps



### Unit 14

18 services  
~2,0 MM km monthly



### Unit 15

26 services  
~2,2 MM km monthly



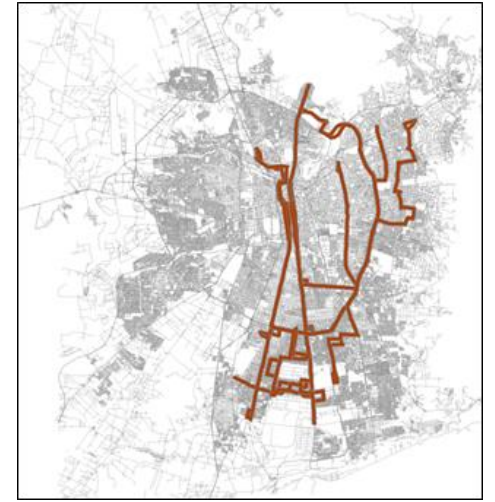
### Unit 16

29 services  
~2,3 MM km monthly



### Unit 17

21 services  
~2,4 MM km monthly



### Unit 18

27 services  
~2,3 MM km monthly



# U14

## PO Benchmark updated to PO September 2023

### 18 Services

21 Prepaid Bus Stop (16 new)

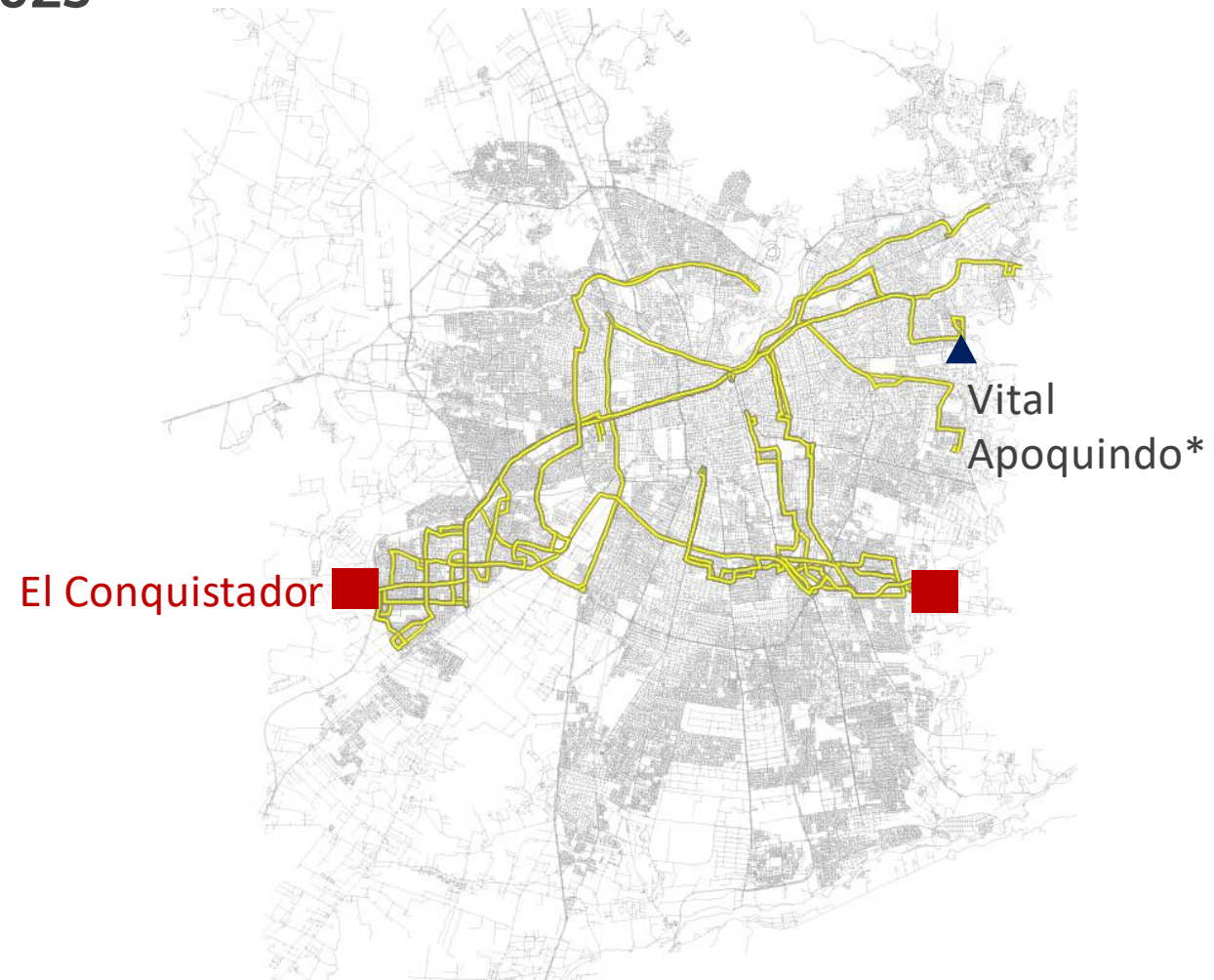
101	320c	419	481
106	401	421	D13
108	405	423	E17
126	413c	431c	
320	417e	432N	

Distribution KM	
A	140.525
B	1.081.094
BPAL	0
C	812.783
<b>Total</b>	<b>2.034.402</b>

(Mes tipo: 21 Lab – 4 Sáb – 5 Dom)



Current distribution of services



Vital Apoquindo\*: Operational terminal shared among units 5/8/11/13/14/16

# U15

## PO Benchmark updated to PO September 2023

### 26 Services

25 Prepaid Bus Stop (17 news)

110	509	E04	J07e
118	513	E08	J07y
129	517	E09	J10
408	517c	E11	J18
505	C25	E14	J18c
505c	E01	J02	
506e	E02	J07	

U3

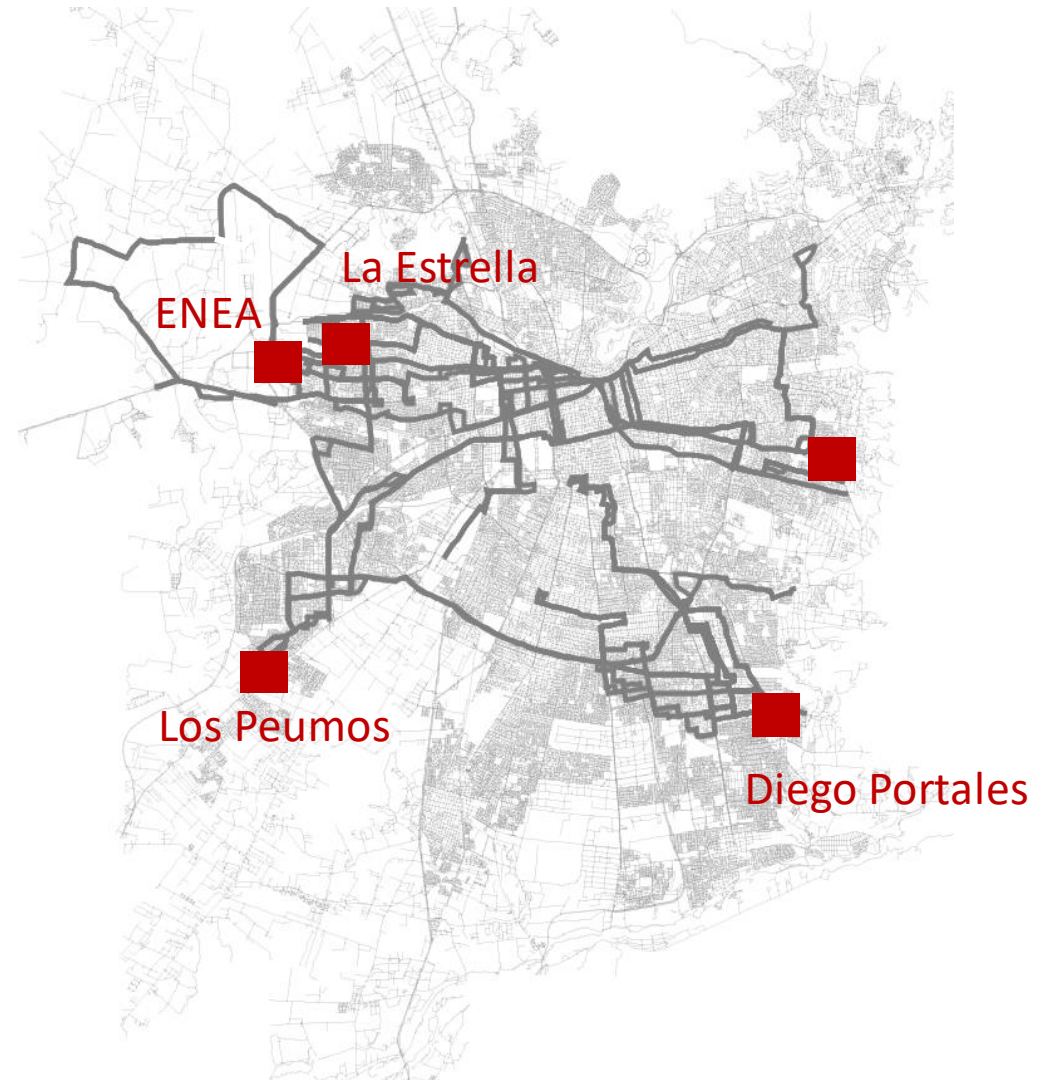
U5

New

Current distribution of services

Distribution KM	
A	56.779
B	1.440.981
BPAL	0
C	697.593
<b>Total</b>	<b>2.195.353</b>

(Mes tipo: 21 Lab – 4 Sáb – 5 Dom)



# U16

## PO Benchmark updated to PO September 2023

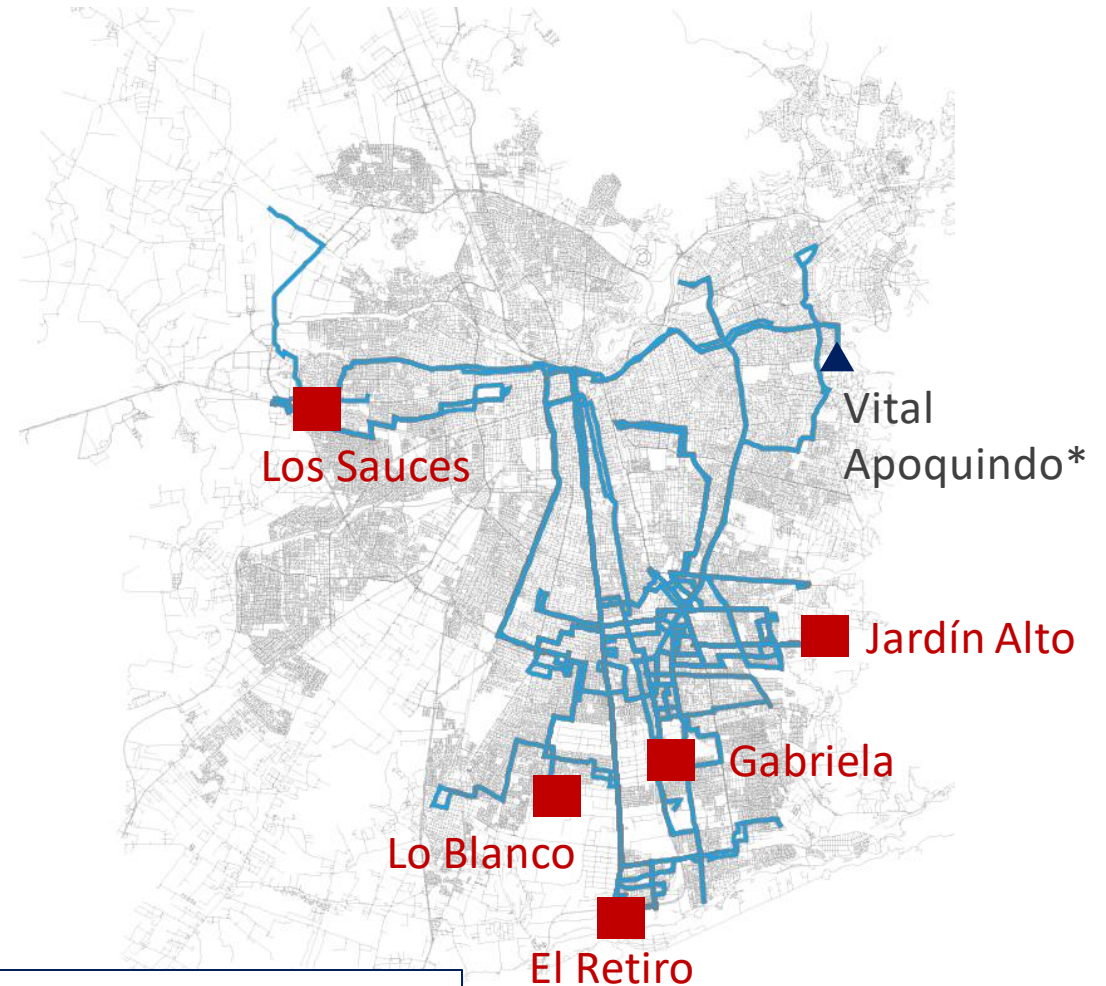
### 29 Services

16 Prepaid Bus Stop (5 new)

207	225c	323	E10	E20
207c	234	325	E12	F28
207e	290e	503	E13	G28
209	302	E03	E15	J07y
209c	302N	E05	E16	J19
225	322	E07	E18	

Distribution KM	
A	186.273
B	1.506.016
BPAL	0
C	598.052
<b>Total</b>	<b>2.290.341</b>

(Mes tipo: 21 Lab – 4 Sáb – 5 Dom)



Current distribution Services

Vital Apoquindo\*: Operational terminal shared among units 5/8/11/13/14/16

# U17

## PO Benchmark updated to PO September 2023

### 21 Services

23 Prepaid Bus Stop (6 new)

201	210	227	H04
201e	210e	230	H05
204	210v	264N	H09
204N	214	272	
205	224	B41	
205c	226	H02	

Distribution KM	
A	121.873
B	1.169.792
BPAL	608.217
C	510.646
<b>Total</b>	<b>2.410.528</b>

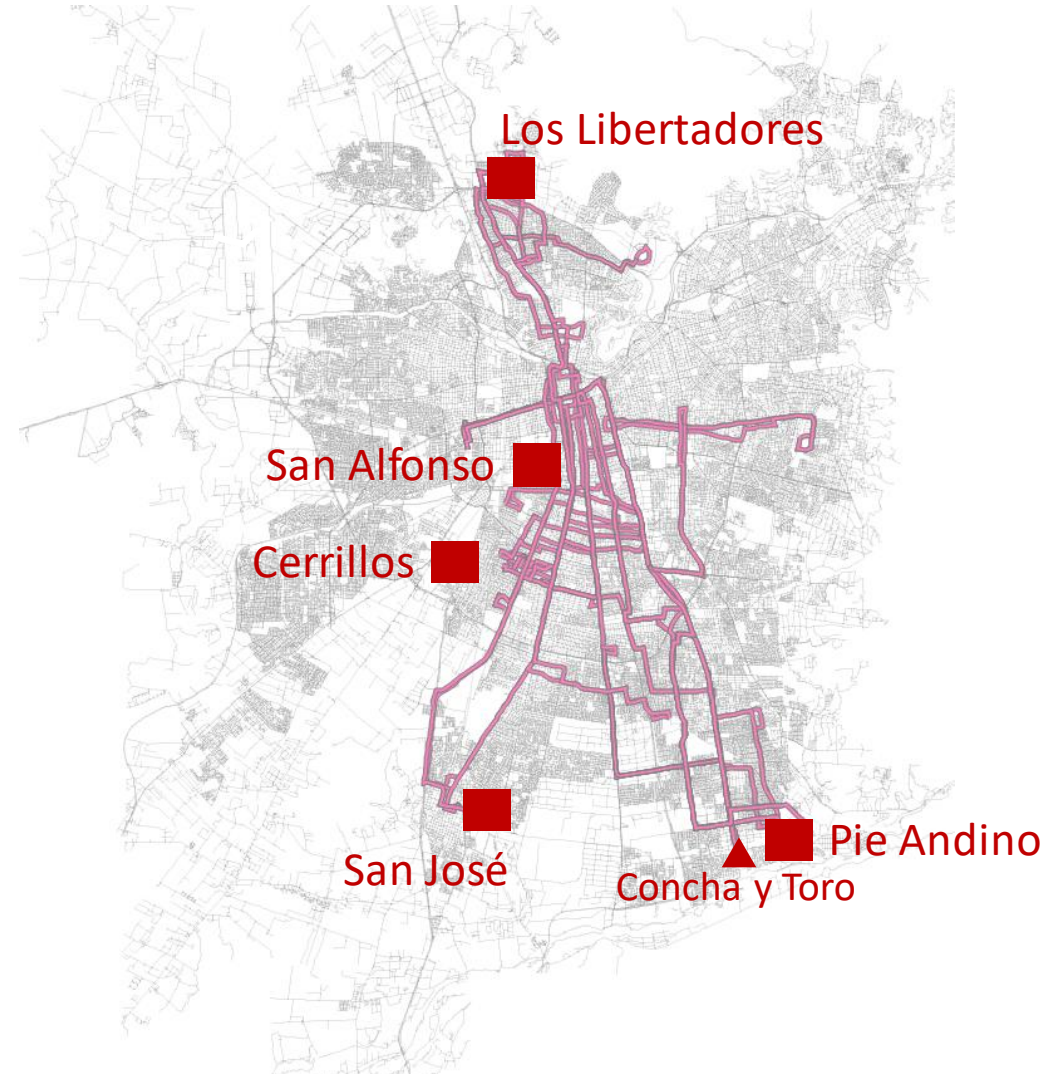
(Mes tipo: 21 Lab – 4 Sáb – 5 Dom)

U2

U3

New

Current distribution Services



# U18

## PO Benchmark updated to PO September 2023

### 27 Services

40 Prepaid Bus Stop (4 new)

203	208c	244	346N
203c	212	271	G23
203e	216	301	H07
203N	216y	301c	H08
206	219e	306	H12
206c	219ey	321	H13
208	229	345	

Distribution KM	
A	40.338
B	1.353.607
BPAL	0
C	925.788
<b>Total</b>	<b>2.319.733</b>

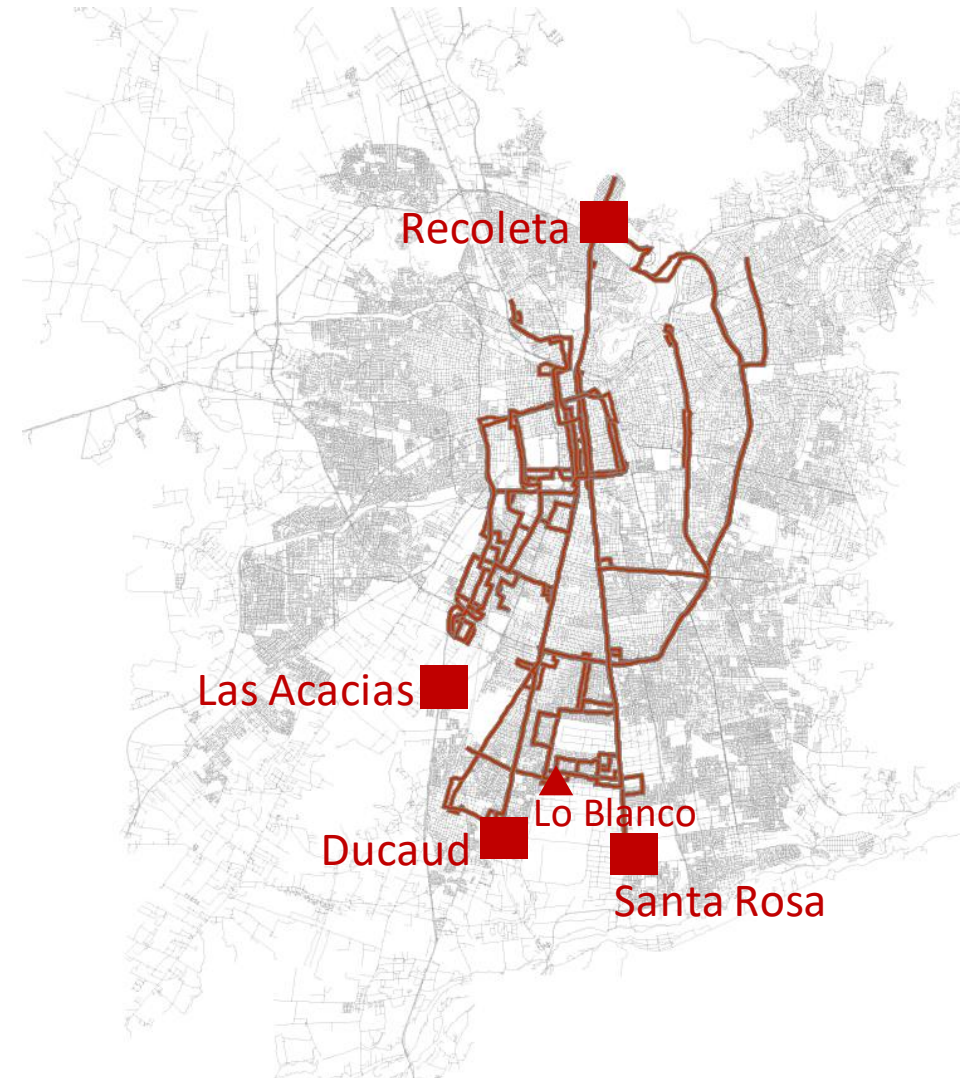
(Mes tipo: 21 Lab – 4 Sáb – 5 Dom)

U2

U3

Nuevo

Current distribution Services





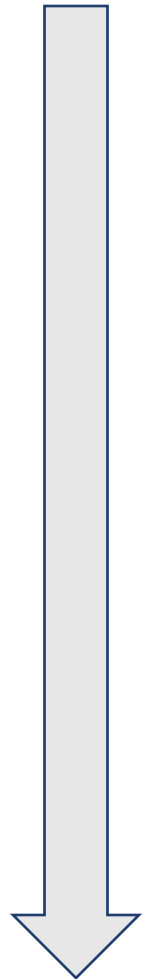
BIDDING RULES FOR THE USE OF TRACKS

# Evaluation and Payment Scheme

**Diego Cruz**  
Finance Manager DTPM

# Evaluation of Bids

# Stages of Evaluation



Opening of Technical Bids and Reserved Number



Admissibility Assessment



Technical Assessment

Opening of the financial bids



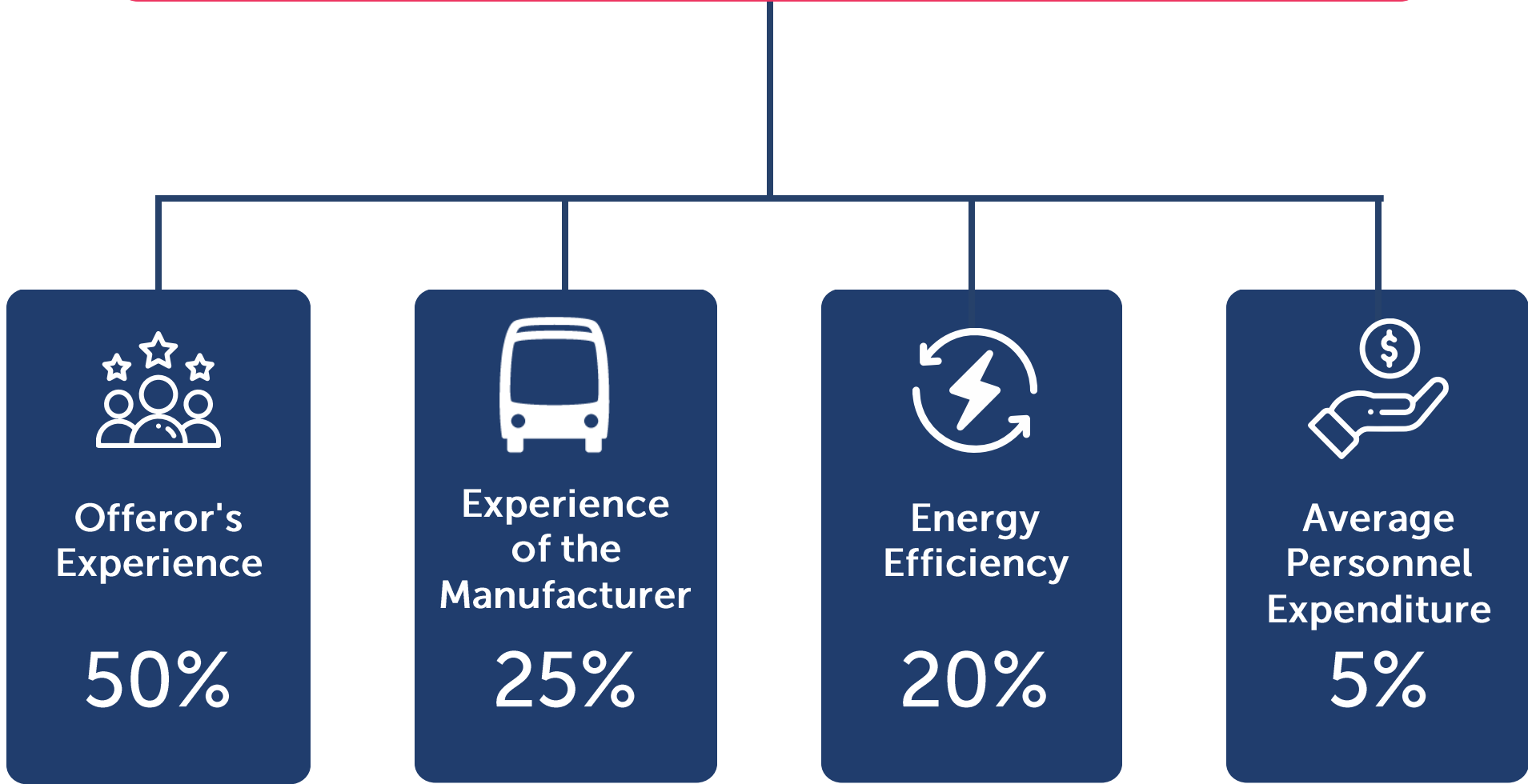
Economic Evaluation



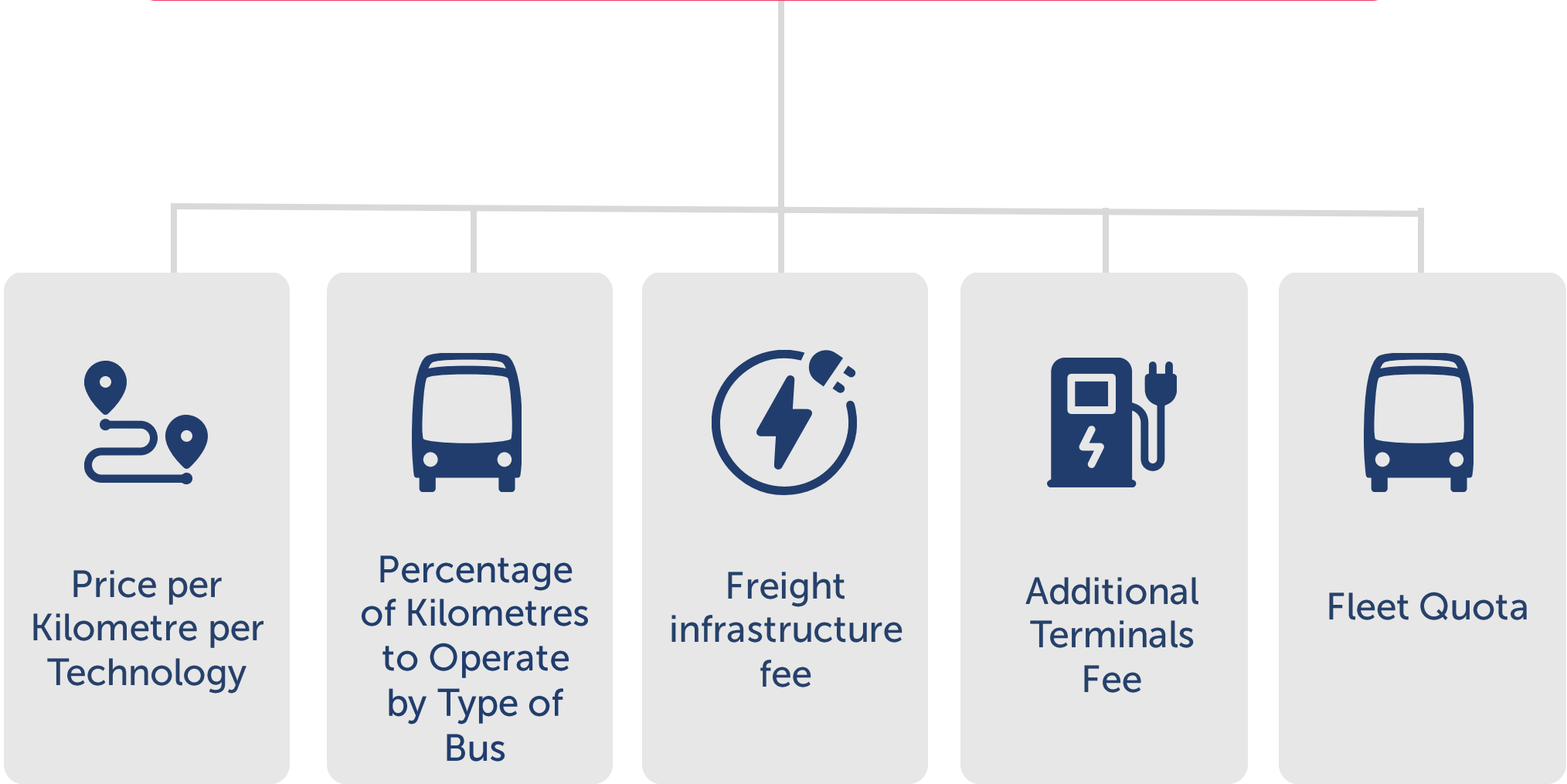
Final Evaluation



# TECHNICAL ASSESSMENT



# ECONOMIC EVALUATION



# FINAL EVALUATION



Economic  
Value of the  
Offer

**97%**



Personnel  
Expenditure

**1,5%**



Energy  
Efficiency

**1,5%**

## Conditions of Award

Maximum of 2 units awarded

Concentrate less than 50% of the fleet



# Payment Scheme

## AND GENERAL TERMS AND CONDITIONS

# Payment for Transport Services

## Dealer Revenues



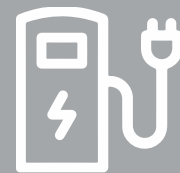
Kilometres  
Operated



Passenger  
Transported



Fleet Quota



Freight  
Infrastructure



Terminals  
Additional

### Other revenue



Evasion



Good  
performance



TAG

Indicators

# Indicator Model

**Offer  
Fulfilment  
ICFP**

**Waiting Time**

IE - IP

+4%

-5%

**Quality of Care**

ICA

+1%

-1,5%



Ministerio de  
Transportes y  
Telecomunicaciones

Gobierno de Chile

**DTP**

Directorio de Transporte Público  
Metropolitano



SPECIFICATIONS

# Fleet and Technological Systems

**Alejandro Schmidt**

Manager of Intelligent Transport  
Systems DTPM



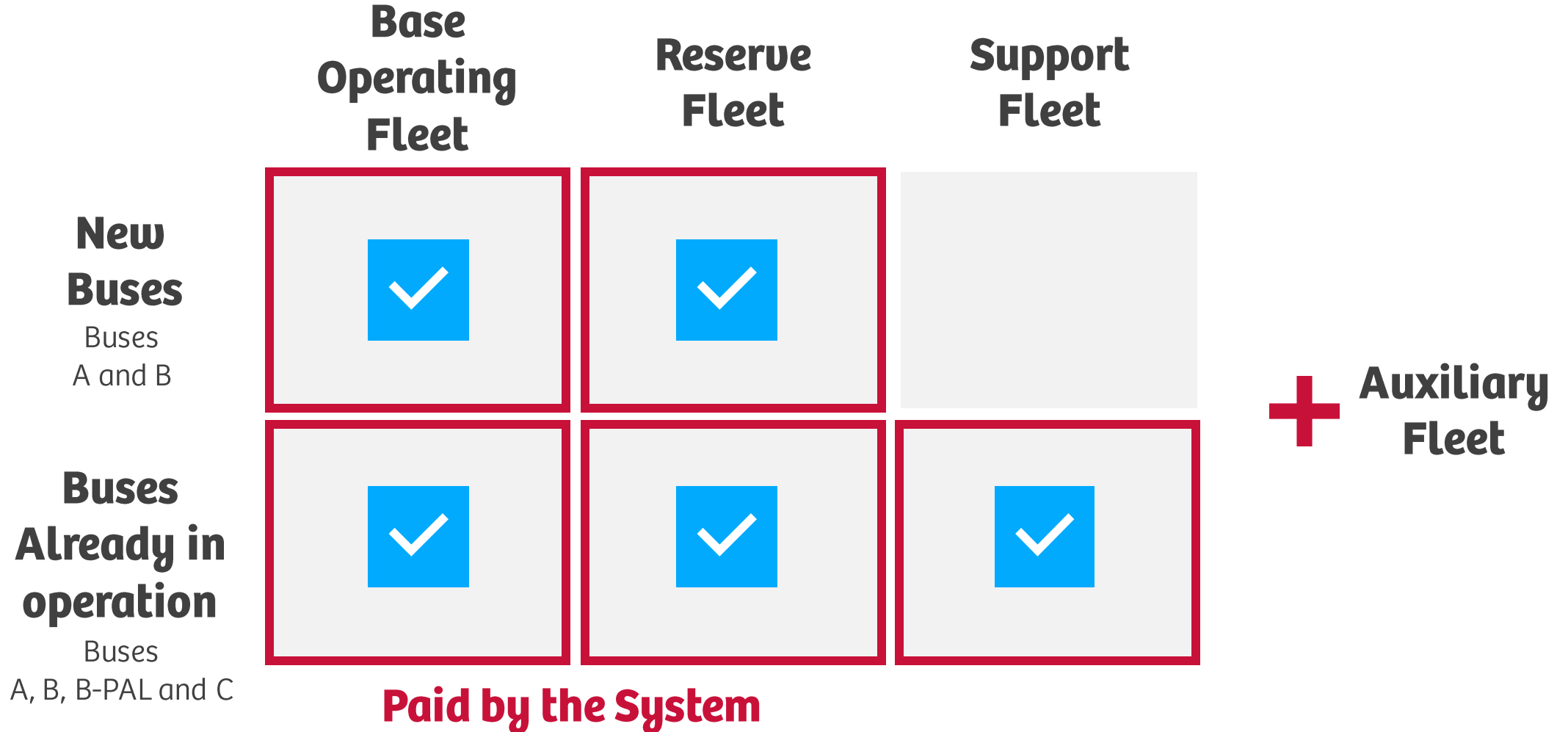
# Fleet

## New Buses and Supply Contracts



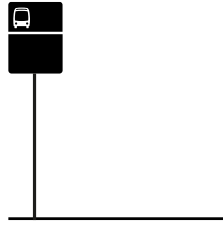
# Fleet Composition

Fleet Types, Distribution and Payments



# Buses ready to operate in Santiago

## General conditions of operation



**3-4 stops per km**  
Constant accelerations  
and stops



**Up to 100 km**  
Round-trip Distance



**18 km/hr**  
Average Speed



**Gradients**  
Can be as high as 18%



# Standards and Specifications

licitación pública concesión de uso de vías 2023  
PARA LA PRESTACIÓN DE SERVICIOS URBANOS DE TRANSPORTE PÚBLICO  
REMUNERADO DE PASAJEROS MEDIANTE BUSES

**ANEXO N°5: ESPECIFICACIONES DE LOS BUSES**

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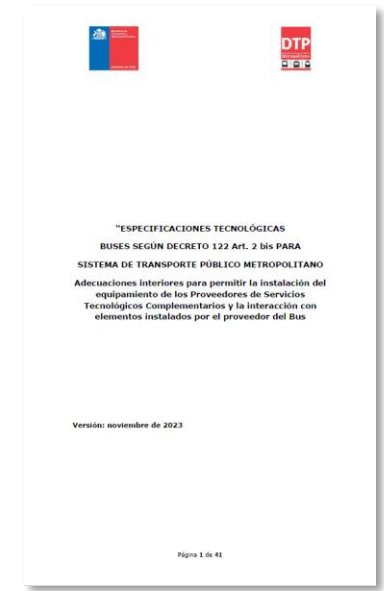
**Annex N°5  
Tender Documents**



**DS 122/1991**



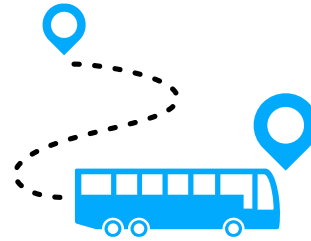
**Manual of  
Graphic Standards**



**Technological  
Specifications Manual**

# Electric Buses

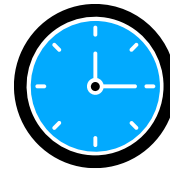
## About the buses



### Minimum Autonomy

**Slow charge:** 200km (160 km)

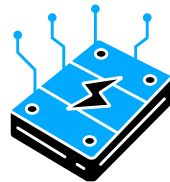
**Fast charge:** 50km (40km)



### Charging Time

**Slow charge:** 5 hrs (100% SoC)

**Fast charge:** 9 minutes (minimum autonomy)



### Battery Warranty

They must be warranted for at least 10 years or 800,000 km.



### LOCAL SUPPORT

**Bus provider, or its designate, must have local support and have local support and adequate infrastructure**

# Lifetime of vehicles

Applicable requirements

## New Buses

**10<sup>\*</sup>**  
years

**800.000**  
Kilometres

 Renewable insofar as technical and safety conditions are ensured.

**Buses Already  
in Operation**



Conditions defined in the **respective supply contracts**

# Delivery time

For the entry of buses into the system

- **9 months** from the signing of the concession contract
- The processes of certification, permits and registration of buses should be contemplated
  - Registration in the Registry of Motor Vehicles (Civil Registry and Identification Service)
  - Registration in the National Registry of Public Transport Services
  - Registration in the Register of Affected Goods
  - Vehicle registration permit
  - Technical inspection

# Maintenance Certification

- Obligation to contract a third party to carry out the **Certification process**
- Documentary Audit
- Technical Inspection
- Review of the General Condition Of the Bus

# Technological Elements and Systems



# Technological Systems

## Main elements

**Internal Variable  
Information Displays**

**Security Cameras**

**External Variable  
Information Displays**

**USB Chargers**

**Detection system for the  
proximity of elements**

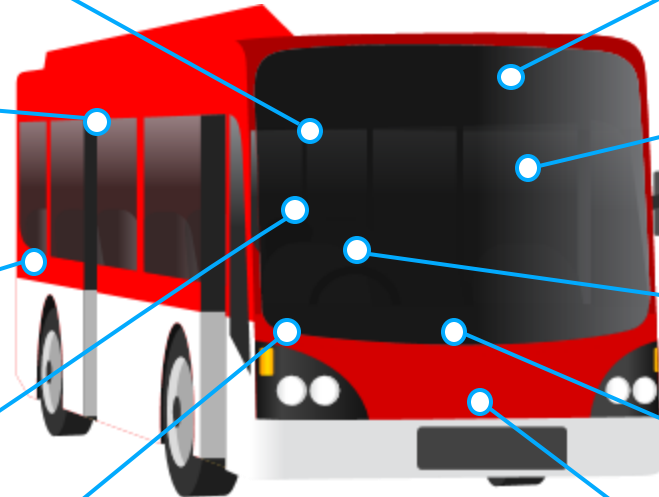
**Energy efficiency system  
and driving quality**

**Wi-Fi on board**

**Availability of energy**

**Panic Button**

**Telemetry and Interface CANBUS**



# Interior Variable Information Display

- Display installed on each bus for **announcement of the next stop**, with the possibility to connect to fleet management system
- It must have a platform for content management
  - Content deployed on each bus
  - Communications for transmission/update of new content
  - Testing and validation of content
  - Monitoring of the level of operability of the displays

# Element proximity detection system

- The system shall provide **visual and audible alerts to driving personnel** in the following situations
  - Head-on collision: Reckless distance
  - Existence of pedestrians or cyclist in side blind spots
- It must have a platform for accessing information on alerts generated.
  - Access remotely and in real time to the data recorded by the system
  - Access historical information on the different variables recorded (5 years).
  - Monitor the operability of each device

# Panic Button

- Button close to the steering wheel, hidden from the public but accessible to driving personnel to alert them to **risky situations**
- Must have a platform for accessing data
  - Real-time transmission of button activation and deactivation
  - Display of alerts of last activations (with confirmation of receipt by CMB/COF)
  - Historical data analysis module
  - Visualisation of the level of operation of the panic buttons

# Security Cameras

- Camera system to protect the safety of users and driving staff
- Must have a platform for accessing camera footage
  - On-line streaming of buses on request from control centres
  - Communications for image display from COF and CMB
  - Image transmission must be activated at the moment of activation of the panic button

# Telemetry Interface CAN-BUS

- System for monitoring the main **operating variables of buses** with emphasis on those related to electric propulsion
- A platform will have to be set up to access this information
  - Real-time vehicle performance data
  - Access to aggregated variables (consumption, mileage, performance)
  - Storage of historical information
  - Access to alerts and fault visualisation



**Thank you**