

The Public Transport System of Santiago - Standard Buses

Regulation establishing requirements for vehicles for the Public Transport System of Santiago and the process of certification of their compliance.

I. Supreme Decree No. 122/1991, Establishing Dimensional and Functional Requirements for Vehicles that provide Urban Collective Transport Services.

The Supreme Decree No. 122 from 1991 of the Ministry of Transport and Telecommunications is the norm that establishes the dimensional and functional requirements for vehicles that provide public transport services in urban areas throughout Chile. Its current version is available in Spanish: <https://www.leychile.cl/Navegar?idNorma=9612>.

This regulation also establishes the requirements for vehicles that are specific to the Santiago Transport System, mainly in article 2 bis and article 7, which define the classes of vehicles allowed and the requirements with which they must comply.

Currently, there is a Project for Modification of the regulations that aims to improve the quality of service provided to users, mainly regarding the implementation of measures aimed at strengthening safety, comfort and efficiency based on the new transportation needs of people.

The Project for Modification is in the process of national and international public consultation through the World Trade Organization, whose text is available in the following links:

http://www.mtt.gob.cl/wpcontent/uploads/2017/06/PROYECTO_Modificacion_Decreto_122_91_junio_2017.pdf
https://members.wto.org/crnattachments/2017/TBT/CHL/17_2599_00_s.pdf

Comments and feedback for the Project for Modification must be sent in writing to the following e-mail address: Tbt_Chile@direcon.gob.cl

The main changes outlined in the Project for Modification are summarized below:

- Classes and Subclasses of Buses: New subclasses of vehicles B1, B2, C1, C2 are added; a new Class D, corresponding to double-decker buses, is added. (Article 2 bis)
- Passenger Capacity: Adds corrections to the counting of folding seats and limits the surface of the upper level in Class D vehicles for standing passengers. (Article 7, No. 2)
- Service doors: Subtracts a door from Class B and C vehicles, allows outward opening, perfects accessibility features, defines dimensions for Class D vehicles and introduces other functional requirements. (Article 7, No. 3)
- Emergency exits: Defines the number of emergency exits in Class D vehicles. (Article 7, No 4)
- Steps: Does not allow interior steps with irregular or asymmetrical applications, in order to improve safety and interior aesthetics of vehicles. (Article 7, No. 5)
- Aisles: Defines the method for measuring aisles in Class D vehicles (Article 7, No. 6)

- Seating: Improves the height, spacing and inclination of the seats. Allows the introduction of padding, folding seats and other complementary devices of support. Incorporates requirements for double seats and features for the driver's seat. (Article 7, No. 7)
- Windows: Eliminates the requirement of a rear window. Except for a mobile window if Air Conditioning is incorporated. (Article 7, No. 8)
- Handrails: Introduces conditions for vertical pillars. Regulates flexible handles and it forbids them in the zones of wheel covers or encapsulations (Article 7, No. 9)
- Fire Prevention: Introduces requirements on the fire behaviour of materials used in the manufacture of parts, proposing several alternatives of international standards for their fulfilment. (Article 7, No. 11).
- Travel indicators: Illuminated signs must comply with the Brazilian standard of the Belo Horizonte Transport System. The standard includes minimum measures of length, width and luminosity. (Article 7, No. 15).
- Vehicle Systems: Incorporates requirements on Manoeuvrability and Stability in Class D vehicles (Article 7, No. 19).
- Wheelchair space and anchorage: Replaces location requirement from "in front of the ramp" to "as close as possible to the ramp". Adds requirement to Class D vehicles and eliminates SIA signal on floor surface. (Article 7, No. 22).
- Internal convex mirrors: They may be excluded if they are replaced by other optical technological devices (cameras and monitor) that fulfil the same functionality. (Article 7, No. 23).
- Internal ventilation: Excludes a number for natural takes, provided it meets the required renewal rate in the same numeral. (Article 7, No. 24).
- Driver's Segregation Cabin: Incorporates requirements that assure conditions of safety, functionality and habitability inside the cabin. (Article 7, new No. 25).
- New Article 8: Adds a new article that allows, in the future, to incorporate other additional requirements that are specific to the country's Transport System, under a transportation regulation scheme such as concession of use of routes, exclusion perimeters or operating conditions.

After the international consultation process is completed, on August 6, 2017, Supreme Decree 122 of 1991 of the Ministry of Transport and Telecommunications will be modified and updated by means of the respective administrative act that the Ministry determines for these purposes.



II. Process of Certification of the vehicles with respect to the fulfilment of the Chilean norm

The purpose of the Certification Process is to verify compliance with the national regulatory requirements for vehicles that can operate in the Santiago Public Transport System, regarding the functional and dimensional aspects of the bus, emission levels of gases and particulate matter from the bus engine, noise emissions and other general conditions for the circulation of motor vehicles.

The Certification process is carried out by the Ministry of Transport and Telecommunications through its Vehicle Control and Certification Centre, 3CV, according to the general guidelines established in Office 1491 of May 7, 2004 available in the following link: <http://www.mtt.gob.cl/archivos/5597>.

The following table describes the regulatory technical requirements examined in the certification process:

Regulation	Scope
Supreme Decree No. 130/2001 of the Ministry of Transport and Telecommunications	Emission standards for carbon monoxide (CO), total hydrocarbons (HCT), non-methane hydrocarbons (HCNMs), methane (CH ₄), nitrogen oxides (NO _x) and particulate matter (PM) for Engines of Collective Transport Buses in the City of Santiago. https://www.leychile.cl/Navegar?idNorma=195386
Supreme Decree No. 129/2002 of the Ministry of Transport and Telecommunications	Establishes a noise emission standard for urban and rural collective transport buses. https://www.leychile.cl/Navegar?idNorma=207430
Supreme Decree No. 122/91 of the Ministry of Transport and Telecommunications	Establishes dimensional and functional requirements for vehicles providing urban collective transport services. https://www.leychile.cl/Navegar?idNorma=9612
Supreme Decree No. 169/2004 of the Ministry of Transport and Telecommunications	Establishes a power to gross technical weight ratio https://www.leychile.cl/Navegar?idNorma=221459
Supreme Decree No. 22/2006 of the Ministry of Transport and Telecommunications	Establishes requirements for brake systems, lights, blinking lights and sound devices. https://www.leychile.cl/Navegar?idNorma=249803
Resolution No. 1/95 of the Ministry of Transport and Telecommunications	Sets maximum vehicle dimensions. https://www.leychile.cl/Navegar?idNorma=31779
Resolution No. 121/87 of the Ministry of Transport and Telecommunications	Sets tailpipe characteristics. https://www.leychile.cl/Navegar?idNorma=167640

The Certification Process consists of carrying out the evaluation of the descriptive technical background of the vehicle and the physical inspection of a prototype or production bus in order to validate the aforementioned requirements. In the case of the accreditation of the emission standard of motor pollutants, this may be completed by submitting technical reports issued by independent certification bodies.

These are the main steps of the Certification Process:

- The applicant submits to the 3CV the descriptive technical background (ATD) of the bus according to the general guidelines (Annexes A, B and C) indicated in Official Communication No. 1491/2004 of the Under-secretary of Transport, indicating, at least with 15 days in advance, the availability of the representative vehicle (prototype or production vehicle) to carry out the verification and testing.

- 3CV communicates to the applicant the date and time of the presentation of the representative vehicle in order to carry out the verification tests and observations to the ATDs, if any.
- 3CV performs the verification and testing of the vehicle, having 5 working days from the presentation of the vehicle to issue the statement regarding compliance with the requirements.
- If the representative vehicle passes the verification, 3CV grants the compliance authorization and the respective verification code that enables the applicant to issue an individual certificate (Annex D) for each vehicle sold.
- If the vehicle does not pass the verification, 3CV issues a report with each aspect that justifies the rejection of the certification request.

The Certification Process has a total time cycle of 20 working days from the formal and complete presentation of all the background information by the applicant at a cost of \$1,138,536 Chilean pesos.¹

In order to apply for certification in the Vehicle Control and Certification Centre (3CV), please visit their offices located in Vicente Reyes 198, Maipú, from Monday to Friday from 9 AM to 2 PM.
Phone numbers: (+562) 2538 7009 - (+562) 2538 7015.

III. Contact

For inquiries regarding the Standard Bus Requirements for the Use of Routes, please contact Miss Celia Iturra Molina, Specialist in Vehicles and Sustainable Transport, from the Secretary of Strategy and Planning at redisenio.contacto@dtpm.gob.cl.

For inquiries regarding the Homologation Process, please contact Mr. Alfonso Cadiz Soto, Technical Secretary of the Vehicle Control and Certification Centre (3CV) at acadiz@mtt.gob.cl.

¹ Estimated value in dollars: USD 1,720 as of June 28, 2017.