



SLOVENSKI STANDARD
SIST ENV 13093:2003

01-oktober-2003

Javni prevoz – Cestna vozila – Zahteve za mehanski vmesnik voznikove konzole – Minimalni parametri za prikazovalnik in tipkovnico

Public transport - Road vehicles - Driver's console mechanical interface requirements - Minimum display and keypad parameters

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: **ENV 13093:1998**
<https://standards.iteh.ai/catalog/standards/sist/0261dc89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003>

ICS:

43.080.20 Avtobusi Buses

SIST ENV 13093:2003 **en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ENV 13093:2003](#)

<https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003>

EUROPEAN PRESTANDARD
PRÉNORME EUROPÉENNE
EUROPÄISCHE VORNORM

ENV 13093

May 1998

ICS 43.080.20; 45.060.01

Descriptors: road transport, road vehicles, public utilities, information interchange, data transmission, man-machine systems, driver aid equipment, interfaces, specifications

English version

Public transport - Road vehicles - Driver's console mechanical
interface requirements - Minimum display and keypad
parameters

This European Prestandard (ENV) was approved by CEN on 26 April 1998 as a prospective standard for provisional application.

The period of validity of this ENV is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard.

CEN members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003>



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

CONTENTS

1. SCOPE OF THE STANDARD	4
2. DEFINITIONS	4
2.1 Driver console:.....	4
2.2 On board Transmission Bus:	4
2.3 AVMS (Automatic Vehicle Monitoring System):	4
3. REFERENCES	4
4. REQUIREMENTS.....	5
4.1 Location	5
4.2 Dimensions.....	5
4.2.1 Front face of driver console. (visible)	5
4.2.2 Required space for the integration of the driver console into the driver dashboard.	5
4.3 Fixing.....	6
4.4 Electrical connections	6
4.5 Front face.....	7
4.5.1 Display.....	7
4.5.2 Keypad.....	8
5. DISPLAY AND KEYPAD FUNCTIONS.....	8
5.1 Display of date and time.	8
5.2 Identification of vehicle/driver operations.....	8
5.3 Vehicle location management.	8
5.4 Voice transmission management.....	8
5.5 Information on departure, for driver.	8
5.6 Vehicle location information, to driver.....	8
5.7 Vehicle regulation information, to driver.....	8
5.8 Vehicle pre-emption at intersections, for driver.....	8
5.9 General messages display from Control Centre, to driver.....	8
5.10 Special events reporting, to driver.	9
5.11 Special events reporting, from driver.....	9
5.12 Interface to the ticketing system.....	9
5.13 Onboard peripherals management.....	9
5.14 Onboard peripherals test.	9
5.15 Data transfer to the Control Centre.....	9
5.16 Communication with external equipment.....	9
6. ENVIRONMENTAL AND ELECTRICAL CONDITIONS AND LIMITS.....	9



Foreword

This European Prestandard has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NNI.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ENV 13093:2003](https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003)

<https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003>

1. SCOPE OF THE STANDARD

The driver console is a device fitted on road, urban, inter-urban and rural public transport vehicles as an interface between the driver and all onboard equipment for AVMS.

The driver console must respect a set of given conditions, in order to be compatible with ergonomic design of driver environment and functional ergonomics for driver use.

The driver console defined in this standard is the main interface between the driver and the AVMS.

This standard refers to the console installed in all public transport vehicles, and specifies location, dimensions, and fixing method of this device.

The aim of this standard is also to specify a minimum of display for controls and functions, which has to be fitted according the needs of public transport operators.

2. DEFINITIONS

For the purpose of the present standard, the following definitions will apply:

2.1 Driver console:

The man-machine interface which displays information to the driver, or accepts inputs from the driver, to take into account events of vehicle operation.

The driver console is connected to the other AVMS onboard equipment.

When the vehicle is fitted with a driver controlled ticket vending machine, this console may be used for this purpose, or there may be a specific ticket vending machine console.

2.2 On board Transmission Bus:

A set of wires connecting together the different on board AVMS equipment for powering and data transmission, and the associated transmission protocols.

2.3 AVMS (Automatic Vehicle Monitoring System):

System equipment on board the vehicle of road, urban, inter-urban and rural public transportation (buses and tramways, excluding transportation in complete individual sites such as trains) and the corresponding equipment installed on the ground, that are designed for the operation of public transportation (operation aid systems, automatic information systems, fare collection systems, maintenance aid systems).

3. REFERENCES

This standard refers to IP 653, for mechanical protection of front face, which is a EN 60529 standard « Degrees of protection provided by enclosures » (IP Code) / IEC 529.1989

4. REQUIREMENTS

4.1 Location

The driver console must be installed in front of the driver, or slightly lateral, at a maximum distance of 1 meter, in order for the driver to read the display while driving, and to press the keypad.

In order to allow the use of the console during driving, for monitoring and controlling functions, it is recommended that this console be integrated into the dashboard of the vehicle.

4.2 Dimensions

These dimensions are only specified for the integration of the console into the driver dashboard.

4.2.1 Front face of driver console. (visible)

Maximum dimensions:

Width: 245 mm
Height: 135 mm
Depth: 15 mm

STANDARD PREVIEW
(standards.iteh.ai)

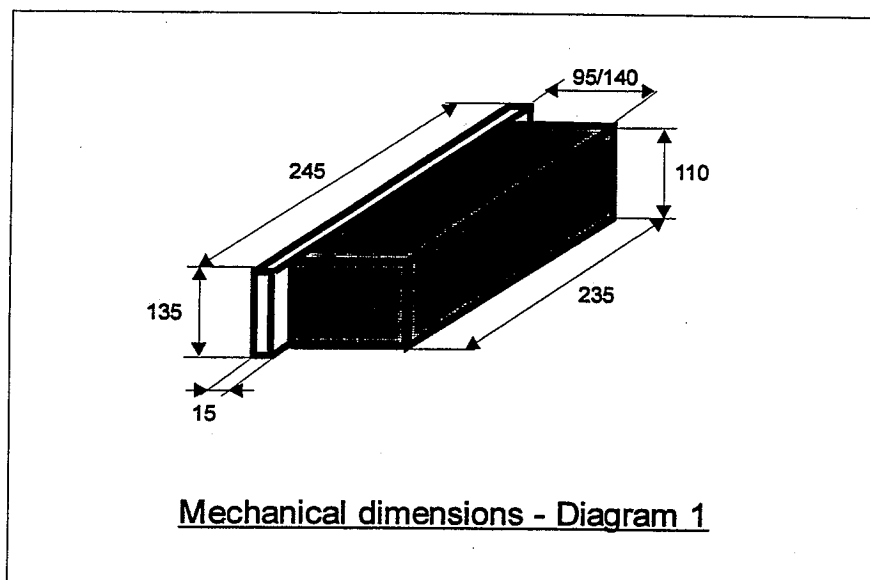
4.2.2 Required space for the integration of the driver console into the driver dashboard.

[https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-](https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003)

[d71cce720d0d/sist-env-13093-2003](https://standards.iteh.ai/catalog/standards/sist/0261de89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003)

Minimum dimensions:

Width: 235 mm
Height: 110 mm
Depth: 95 mm (External connector not included)
140 mm (External connector included)



4.3 Fixing

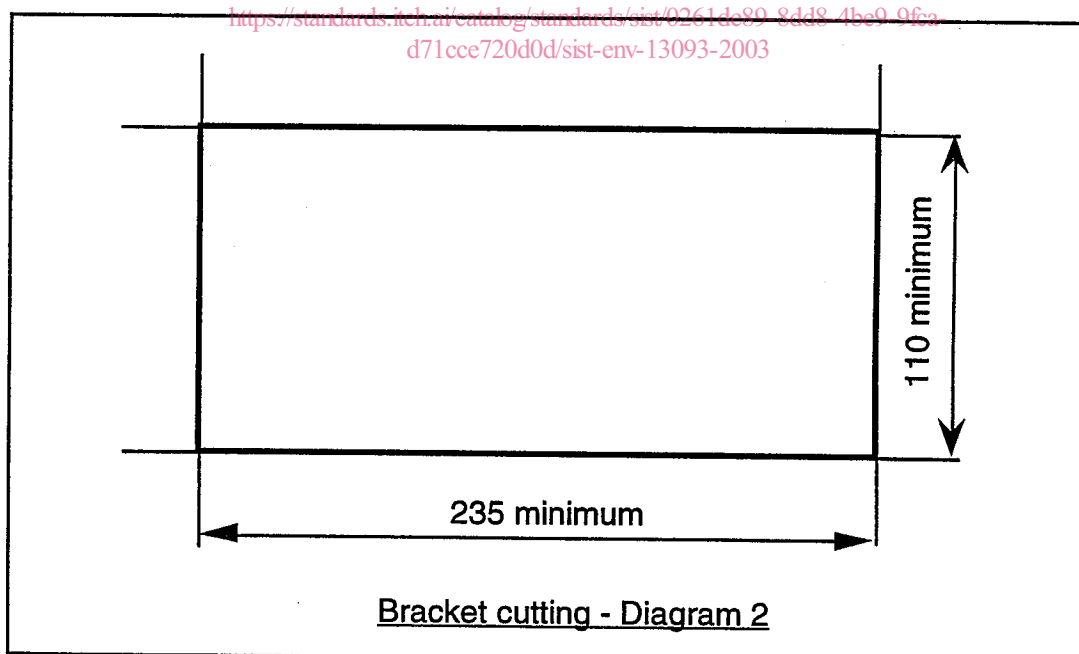
The driver console can be installed in its aperture, for example according Diagram 2 hereafter, or through an specific adapter, with self-retaining screws.

(standards.iteh.ai)

It must be easy to install and to remove, with a possibility of theft-proof mounting.

SIST ENV 13093:2003

<https://standards.iteh.ai/catalog/standards/sist/0261dc89-8dd8-4be9-9fca-d71cce720d0d/sist-env-13093-2003>

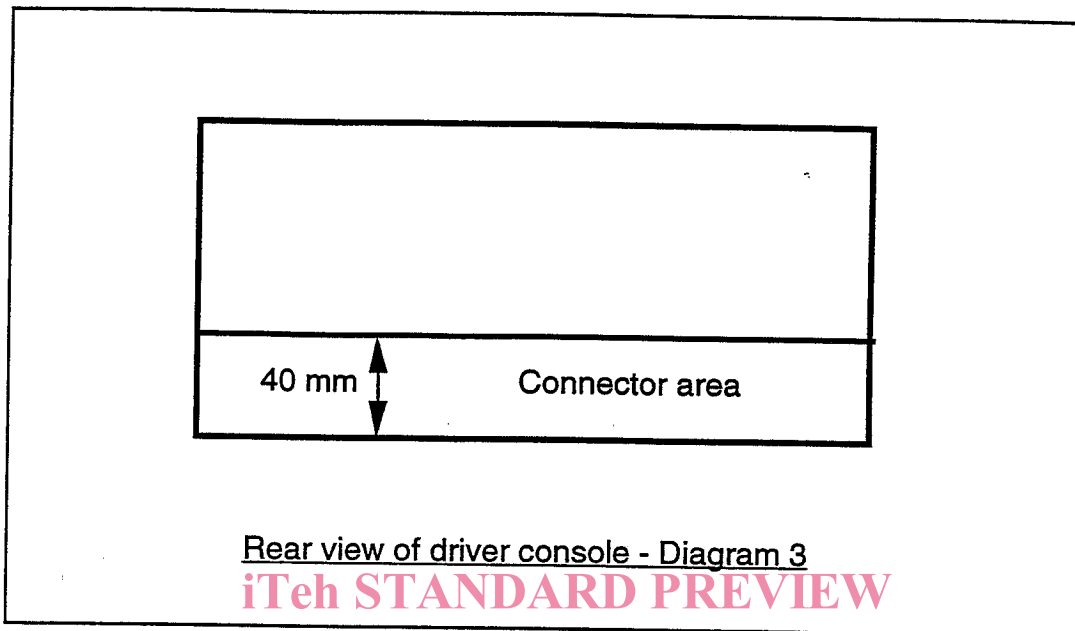


4.4 Electrical connections

When a European standard exists for an on board transmission bus for road public transport vehicles, and is implemented in the vehicle, then the driver console must be connected to this bus.

The plug for connection must be equipped with blocking connections, and must be easy to remove, without any special tool. It must be protected for shipment operations.

The plug must be inside the connector area which is shown here after:



iTeh STANDARD PREVIEW
(standards.iteh.ai)

4.5 Front face

The front face of the driver console must be, at the minimum, IP 653 protected.

This specification doesn't apply to the eventual card slot which may exist in the front face.

4.5.1 Display

The display screen must, at least, provide 2 lines of 16 characters.

Graphic display or bar graph can also be used as complement or extension.

Each character will be a minimum:

- * 7 mm height x 5 mm width digit (pitch of 8 mm x 6 mm), for information which has to be read, during the time the vehicle is moving.
- * 4,5 mm height x 2,5 mm width digit (pitch of 5 mm x 3 mm), for information which has to be read, only when the vehicle is stopped.

The display must be easily readable by the driver, from his driving seat, during day and night, at a minimum distance of 1 meter, without reflections and disturbances for him.

Readability of the display must be at the minimum kept, for a device temperature, between 0°C and 50°C.