SLOVENSKI STANDARD
SIST ENV 12694:2003

01-oktober-2003

Javni prevoz – Cestna vozila – Zahteve za mere zunanjih spremenljivih elektronskih znakov

Public transport - Road vehicles - Dimensional requirements for variable electronic external signs

Ta slovenski standard je istoveten z: ENV 12694:1997

ICS:

35.240.60	Uporabniške rešitve IT v transportu in trgovini	IT applications in transport and trade
43.080.20	Avtobusi	Buses

SIST ENV 12694:2003 **en**

EUROPEAN PRESTANDARD **ENV 12694**

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Descriptors: road vehicles, passenger transport, public utilities, information, teleprocessing, display, signs, definitions, specifications, position (location), dimensions, characteristics

English version

Public transport - Road vehicles - Dimensional requirements for variable electronic external signs

This European Prestandard (ENV) was approved by CEN on 1997-05-28 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 an European Standard (EN).

CEN members are required to announce the existance 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.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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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.

1. SCOPE

This standard refers to variable external signs (mechanical signs without electronic control excluded), when installed in public transport vehicles such as: buses, trams, trolley-buses (undergrounds and railway vehicles are excluded), and specifies location, dimensions, display characteristics, contents of information and wiring.

At the present time there exists a set of technologies for such signs (ex: dot matrix, flaps, films, LCD, etc.).

2. DEFINITIONS

For the purposes of the present standards the following definitions will apply:

Variable external sign:

Device fitted on urban and long distance public transport vehicles which informs the users about the details of operation of that particular vehicle.

Destination information:

Variable information visible from outside the vehicle which displays details of the operation of that vehicle such as: line identification, destination, route taken, terminus or any possible variation to the above related to the operation of the vehicle.

Headsign:

A sign displaying all or part of destination information and located at the front of the vehicle.

Sidesign:

A sign displaying all or part of destination information and located at the side of the vehicle.

Rearsign:

A sign displaying all or part of destination information and located at the rear of the vehicle.

On board transmission bus:

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

A.V.M.S. (Automatic Vehicle Monitoring System):

System equipment on board the vehicle of urban and interurban public transportation (buses and tramways, excluding transportation in complete individual sites such as trains) and the corresponding equipments 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. REQUIREMENTS

The sign surface shall be positioned vertically to the roadway or marginally tilted downwards.

The aim of the standards shall not be to define the individual technologies. However every system shall guarantee good visibility and ease of reading, also in adverse weather conditions such as fog, snow, strong sun light, etc.

These signs shall respect a set of given conditions, in order to be compatible with the characteristics of the vehicle, to allow some interchangeability and to be functionally efficient.

3.1 LOCATION AND DISPLAY CHARACTERISTICS AND CONTENT

3.1.1 Headsign

The headsign shall be located above the windscreen or on the upper part of it.

It is strongly recommended that looking from the ground the line number shall be on the left and the destination on the right.

If there is only the line number it is strongly recommended that the sign shall be placed in the centre or on the left as seen from the ground.

3.1.2 Sidesign

The sign shall be located near the first entrance door or above the door.

The line identification shall be on the left of the sign, as seen from the ground.

In positioning the sign, regulations concerning headroom above seats, if any, shall be complied with.

3.1.3 Rearsign

As seen from outside the vehicle, the sign shall be located in the centre or the right (left for U.K.), on the rear upper part of the vehicle.

It displays at least the line identification.

3.2 CHARACTERS

3.2.1 Generalities

For legibility purposes, the character type (letters and numbers), shall be as close as possible to Helvetica.

It is recommended to use a reduced number of characters and to avoid alternating messages.

Information can be displayed on one or more character lines.

It is recommended that a mixture of upper and lower case letters shall be used.

3.2.2 Colours

Yellow or white on a black background are recommended. However other colours can be used for particular needs, taking into account that the luminous green and red, corresponding to standards for traffic lights and emergency colours, should be avoided.

3.2.3 Classes of character heights (expressed in capital letters):

CLASS A = 70 mm.

CLASS B = 100 mm.

CLASS C = 125 mm.

CLASS D = 150 mm.

CLASS E = 180 mm.

CLASS F = 200 mm.

CLASS G = 240 mm.

CLASS H = ≥ 300 mm.

3.2.4 Recommendations

It is recommended that the character heights chosen conform to the following tables:

MINI-BUSES

	A	B	C	D	E	F	G	H
Headsign line identification		X	X	X	X	X		
Headsign destination single line text		X	X					
Headsign destination multiline text	X							
Sidesign line identification	X	X	X	X	X			
Sidesign destination single line text	X	X	X					
Sidesign destination multiline text	X							
Rearsign line identification		X	X	X	X			

NORMAL BUSES

	A	B	C	D	E	F	G	H
Headsign line identification					X	X	X	X
Headsign destination single line text					X	X	X	X
Headsign destination multiline text	X	X	X					
Sidesign line identification	X	X	X	X	X	X		
Sidesign destination single line text	X	X	X					
Sidesign destination multiline text	X	X	X					
Rearsign line identification					X	X	X	X