



**SLOVENSKI STANDARD**  
**SIST ETS 300 294 E1:2003**

**01-december-2003**

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Television systems; 625-line television Wide Screen Signalling (WSS)

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# EUROPEAN TELECOMMUNICATION STANDARD

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**Television Systems;  
625-Line television**

**Wide Screen Signalling (WSS)**

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## Foreword

This European Telecommunication Standard (ETS) has been produced under the authority of the Joint Technical Committee (JTC) of the European Broadcasting Union (EBU) and the European Telecommunications Standards Institute (ETSI), it was prepared by the Taskforce 16:9 of the PALplus group after consulting both the EBU V/EPS and EBU/V2 groups.

This ETS defines the Wide Screen Signalling (WSS) information for 625 line PAL and SECAM television systems.

**NOTE:** The EBU/ETSI JTC was established in 1990 to coordinate the drafting of European Telecommunication Standards in the specific fields of radio, television and data broadcasting.

The EBU is a professional association of broadcasting organizations whose work includes coordination of its Members activities in the technical, legal, programme-making and programme-exchange domains. The EBU has active members in about 50 Countries in the European Broadcasting area; its headquarters is in Geneva \*.

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<b>Transposition dates</b>	
Date of latest announcement of this ETS (doa):	28 February 1995
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 August 1995
Date of withdrawal of any conflicting National Standard (dow):	31 August 1995

## Introduction

For a smooth introduction of new television services with a 16:9 display aspect ratio in PAL and SECAM standards, it is necessary to signal the aspect ratio used together with some switching information to the television receiver. The receiver should be capable of reacting automatically to this information by displaying the video information in a specified aspect ratio. This signalling is to be considered separately from the type of system used, but it should allow transmission of system related switching information as well.

This ETS permits the later allocation of additional switching information, related to the introduction of enhanced television services.

This ETS is applicable for 625 line PAL and SECAM television systems, but there is potential to adopt it to other standards as well.

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## 1 Scope

This European Telecommunication Standard (ETS) is applicable to 625 line PAL and SECAM systems in use, in case, where wide-screen signalling is required by the broadcasters.

It specifies the wide screen signalling information, the coding and the way of incorporating the coded information into a 625 line system.

The wide screen signalling information contains information on the aspect ratio range of the transmitted signal and its position, on the position of the subtitles and on the camera/film mode. Furthermore some bits are reserved for future EDTV signalling (e.g. PALplus) as well as for future use.

This ETS specifies the transmitted signal. Annex A gives the rules of operation for the minimum requirements for receiver display formats as well as for subtitling.

## 2 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] EBU Recommendation R62 (1990): "Recommendation dominant field for 625-line 50Hz processing".

## 3 Definitions symbols and abbreviations

### 3.1 Definitions

For the purpose of this ETS, the following definition applies:

**letterbox operation:** Is the use of a picture format with an aspect ratio greater than 1,33, in such a way that empty (black) lines are added to conform to a 4:3 transmission format.

### 3.2 Symbols and abbreviations

For the purpose of this ETS, the following symbols and abbreviations apply:

a	aspect ratio
F <sub>s</sub>	clock frequency
O <sub>n</sub>	falling sync edge
T <sub>d</sub>	data bit period
T <sub>s</sub>	sampling period
TXT	Teletext

## 4 Requirements

### 4.1 Line code

The following subclauses specify the line code of the Wide Screen Signalling (WSS).