

# CTA Standard

**Joint EIA/CVCC Recommended  
Practice for Teletext: North American  
Basic Teletext Specification (NABTS)**

**CTA-516 S-2013**

**(Formerly CEA-516 S-2013)**

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**Consumer  
Technology  
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(Formulated under the cognizance of the CTA **R4.3 Television Data Systems Subcommittee**.)

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JOINT EIA/CVCC/RECOMMENDED PRACTICE FOR  
 TELETEXT:NORTH AMERICAN BASIC TELETEXT SPECIFICATION

(NABTS)

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**PREFACE**

This preface is not part of the standard

This standard for the North American Basic Teletext Specification (NABTS) is published jointly by the Electronic Industries Association (EIA) and the Canadian Videotext Consultative Committee (CVCC). This specification represents one of three major teletext systems in use today. The publication of this standard is to document the NABTS to assist those desiring to implement the service and is not an endorsement of NABTS over any other system/service.

The NABTS is based on the following documents:

- [1] "North American Broadcast Teletext Specification" published by CBS, June 22,1981
- [2] Provisional "Broadcast Specification 14" Government of Canada, Department of Communication, June 19,1981.
- [3] Joint ANSI (BSR X3. 110)/CSA (T500) Standard "Video/Teletext Presentation Level Protocol Syntax ( North American PLPS)", 1983 (NALPS).
- [4] " Characteristics of Teletext Systems" CCIR Report 957, Vol. XI, Part 1, Broadcast Service( Television), XVth Plenary Assembly, Geneva 198



JOINT EIA/CVCC RECOMMENDED PRACTICE  
FOR  
TELETEXT:  
NORTH AMERICAN BASIC TELETEXT SPECIFICATION  
(NABTS)

(From EIA/ IS-14 and Standards Proposal No. 1966, formulated under the cognizance of the EIA Broadcast Television Systems (BTS) Teletext Steering Committee and the Canadian Videotex Consultative Committee (CVCC) Teletext Subcommittee.)

### Introduction

This document contains the technical description of the transmission technique, coding language, and user interface for one-way broadcast teletext-service applications in North America.

The first seven chapters in this specification generally correspond to the seven layers in the Open Systems Interconnection (OSI) basic reference model (chapter 1 corresponds to layer 1, etc.), however not all parts of each chapter necessarily correspond to the appropriate layer.

For reference the seven layers, and a summary of their most important functions, are:

- |                  |   |
|------------------|---|
| 1 - Physical     | Provides the mechanical and electrical provisions for the physical interconnection      |
| 2 - Link         | Provides the means for establishing and maintaining data links between network entities |
| 3 - Network      | Provides the means for exchange of network service data units over a network            |
| 4 - Transport    | Provides a universal transport mechanism for lower level protocol                       |
| 5 - Session      | Provides for the binding and unbinding of two presentation entities                     |
| 6 - Presentation | Provides the method of coding and presenting the information                            |
| 7 - Application  | Invokes the protocol directly serving the user  |

For a full specification of the OSI model see ISO 7498-1983, and CCIT X.200.

A fundamental concept embodied in this teletext standard is that of maintaining the distinction between the means of transporting the data and the coding of the teletext message. The data transmission system does not impose any restriction on the data which can be transmitted. Similarly, the coding language is independent of the transmission technique. For example, the presentation technique of this coding language may be used with conventional modems on a switched telephone network.

Because of this careful separation of functions, similar to the convention recommended by International Radio Consultative Committee (CCIR) and the International Telegraph and Telephone Consultative committee (CCITT), the present standard allows advances in technology without making basic level equipment obsolete.

The transmission system is defined in chapters 1, 2, 3 and 4. That part of the standard dealing with the coding and utilization of the teletext message is defined in chapters 5, 6 and 7. Chapter 6