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## PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

COMMISSION ADVISORY AND COMPLIANCE DIVISION - RESOLUTION NO. T-13036 Telecommunications Branch January 11, 1989

# RESOLUTION

RESOLUTION UPDATING MINIMUM STANDARDS FOR TELECOMMUNICATIONS DEVICES FOR THE DEAF PROVIDED UNDER SECTION 2881 OF THE PUBLIC UTILITIES CODE PURSUANT TO RECOMMENDATION OF THE D.E.A.F. TRUST EQUIPMENT STANDARDIZATION ADVISORY COMMITTEE AND DECISIONS D.92603, D.92871, AND D.87-4-027.

#### SUMMARY

This Resolution provides for updating the minimum Telecommunications Device for the Deaf (TDD) standards as specified by the D.B.A.F. Trust Equipment Standardization Advisory Committee at its August 18, 1988, meeting.

The proposed TDD minimum standards, which will apply to new or upgraded dévices purchased by the operating companies for distribution to subscribers pursuant to Section 2881 of the Public Utilities Code, are: 4-row keyboard, 2 K (2048) byte memory with 3 message buffer, Voice Announcer, 300 BAUD ASCII code capability (in addition to previous 110 BAUD ASCII and Baudot 5-unit code capability), field replaceable battery pack (paid for by D.B.A.F. Trust, user installable, if desired), and minimum one-year warranty.

The D.R.A.F. Trust Administrative Committee is ordered to review the proposed minimum standards to determine if they are cost-effective; if the proposed standards are adopted by the Trust Administrative Committee, the Administrative Committee will determine a policy for integration of the new standards with the base of existing TDDs in service and in inventory.

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Previous Decisions (D.92603, January 21, 1981, and D.92871, April 7, 1981, established minimum requirements for TDDs issued by the operating telephone companies for the deaf and hard-of-hearing

telecommunications service programs established under Public Utilities Code Section 2881 and following. (see Appendix A. D.92871, OII 70).

D.92871 emphasized that these were minimum standards; the operating companies were free to purchase and provide TDDs having additional features so long as they are cost competitive. Recognizing that technological advances results in new and improved products on the market, the Commission in D.87-04-027 (I.86-07-031), ordered that an Equipment Standardization Advisory Committee be established with the responsibility for recommending and updating, as new technology develops, a standard equipment list for the disabled programs. The Commission Advisory and Compliance Division (CACD) is represented by a member of the Committee.

Equipment recommendations by the Committee are subject to engineering evaluation by the operating companies and should be considered in terms of cost effectiveness by the Trust Administrative Committee before final adoption.

Previous TDD minimum standards called for a minimum character set satisfied by a 3-row keyboard requiring a shift between figures and letters, and a 110 BAUD ASCII/5-unit BAUDOT code capability. A visual electroluminescent display, hard-copy printout, acoustic coupler, portability, and A.C./battery operation were also specified. Provision of additional batteries and paper were the responsibility of the user.

The new TDD standards would provide for a 4-row keyboard which eliminates the requirement for the user to shift between a figures (numbers) and a letters mode when typing. They also include at least 2048 bytes of user programable message storage arranged in 3 or more buffers, a Voice Announcer to alert hearing parties that a hearing-impaired caller is using a TDD to place the call, 300 BAUD ASCII code capability, a user replaceable battery (paid-for by the D.E.A.F. Trust) and a minimum one-year warranty.

#### DISCUSSION

The Commission has always intended that new technological developments affecting the equipment provided deaf and disabled telephone subscribers pursuant to the programs under Public Utilities Code Sections 2881 and following be integrated into the program in a timely and cost-effective manner.

As long as an item is useful and serviceable it should continue to be employed in the programs; equipment may be upgraded to meet some or all of the new standards as long as such an upgrade is cost-competitive. Non-serviceable or non-usable equipment should be disposed of by the operating companies in the most efficient manner. Wherever economically feasible, new equipment purchases should implement the

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latest minimum standards or current state of the art. The operating companies are encouraged to investigate new technological developments and experimental prototypes on a case-by-case trial basis, as appropriate, and report the results of the investigations to the Equipment Standardization Advisory Committee.

The Equipment Standardization Committee should review the minimum standards requirements periodically to determine if revised standards reflecting new technology are appropriate. The D.R.A.F. Trust Administrative Committee will determine when such revised standards are economically feasible for the program and implement them as appropriate.

The minimum standards adopted by the Equipment Standardization Advisory Committee at its August 18, 1988, meeting, and presented by CACD in Appendix A to this Resolution, represent the current TDD technology, and are readily available through competitive bid from more than one vendor. We will recommend these minimum standards for consideration by the Trust Administrative Committee for its approval as new TDD purchases/upgrades by the operating companies as required to meet the needs of the programs.

### FINDINGS

- 1. D.92603 and D.92871 established minimum standards for the TDDs distributed by the local exchange operating companies pursuant to Public Utilities Code Sections 2881 and following.
- 2. D.87-04-027 established a D.E.A.F. Trust Equipment Standardization Advisory Committee with the responsibility to establish a standard list of equipment to be provided under the programs and to update the list as new technology appears. The D.E.A.F. Trust Administrative Committee has the responsibility to ensure that the standards proposed by the Equipment Standardization Committee are cost-effective before the Administrative Committee approves reimbursement of expenses incurred by the operating companies for TDDs meeting those standards.
- 3. On August 18, 1988, the Equipment Standardization Advisory Committee recommended that new TDD minimum standards be adopted (see Appendix A prepared by CACD).
- 4. We find these proposed standards to be reasonable for new or upgraded TDDs to be purchased by the local operating companies for the programs, and we request that the D.R.A.F. Trust Administrative Committee consider these proposed standards for adoption if they are cost-effective.
  - 5. If the D.B.A.F. Trust Administrative Committee determines the proposed TDD minimum standards to be cost-effective, we request that the D.B.A.F. Trust Administrative Committee establish a policy to be followed by the local operating companies for integration of the

proposed TDD minimum stands with the existing TDDs in service and in inventory for the programs. This policy should specify what standards new TDD purchases should meet, and how existing TDDs in service or in inventory should be upgraded (in whole or in part, or not changed at all, if appropriate) to comply with the proposed standards.

#### IT IS ORDERED THAT

- 1. The D.E.A.F. Trust Administrative Committee review the proposed TDD minimum standards recommended by the Equipment Standardization Advisory Committee on August 18, 1988 (see Appendix A), to determine if the proposed TDD minimum standards are cost-effective.
- 2. If the proposed TDD minimum standards are determined to be cost effective and are approved by the D.E.A.F. Trust Administrative Committee, the Administrative Committee will determine a policy for integrating purchases of TDDs meeting the new minimum standards with the needs of the programs provided by the local operating companies. The Administrative Committee will also determine how existing TDDs in service or in inventory should be upgraded (in whole or in part, or not changed at all, if appropriate) to comply with the new minimum standards. The Administrative Committee will inform the local exchange operating companies of its determination on the proposed TDD minimum standards and its requirements for integration of the new TDD minimum standards with the needs of the programs.
- 3. The Trust Administrative Committee will also inform the Director of the Commission Advisory and Compliance Division of its determination on the proposed TDD minimum standards, and on its requirements for the local operating companies for integration of the proposed standards with the needs of the programs.

I certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on January 11, 1989. The following Commissioners approved it:

G. HITCHEIL WILK
President
FREDERICK R. DUDA
JOHN B. CHANIAN
Commissioners

Executive Director

Resolution T-13035 January 11, 1989 Appendix A

Proposed TDD Minimum Standards

D.B.A.F. Trust

Rquipment Standardization Advisory Committee

August 18, 1988

4-row keyboard (no figures-letters shift)

2 K (2048) byte memory with 3 message buffers

Voice Announcer

300 BAUD ASCII

Field Replaceable Battery Pack (paid for by D.B.A.F. Trust, user installable, if desired)

Minimum one-year warranty