TIA/EIA-IS-883

Telecommunications

Telephone Terminal Equipment

Supplemental Technical Requirements for Connection of Stutter Dial Tone Detection Devices and ADSL Modems to the Telephone Network

Formulated under the cognizance of TIA Subcommittee TR-41.9
Technical Regulatory Considerations

With the approval of TIA Engineering Committee TR-41
User Premises Telecommunications Requirements

Table of Contents

1. SCOPE 1

2. NORMATIVE REFERENCES 1

3. ACRONYMS AND DEFINITIONS 1

3.1 ACRONYMS 1
3.2 DEFINITIONS 1

4. STUTTER DIAL TONE DETECTION DEVICES 2

5. ADSL MODEMS 2

FOREWORD

(This foreword is not part of this standard.)

The Federal Communications Commission (FCC), in its Report & Order on CC Docket No. 99-216, mandated the creation of the Administrative Council for Terminal Attachments (ACTA). ACTA is charged with adopting and publishing technical criteria to prevent harms to the telephone network. This interim standard was created for submission to ACTA in accordance with 47 CFR 68.604. It is intended to become an addendum to TIA/EIA-IS-968, *Telecommunications – Telephone Terminal Equipment – Technical Requirements for Connection of Terminal Equipment to the Telephone Network*. The latest requirements adopted by ACTA may be found at www.part68.org.

This interim standard was produced by Working Group TR-41.9.1 of Subcommittee TR-41.9, Technical Regulatory Considerations. It is based on the technical requirements identified in the streamlined waiver processes previously used by the Federal Communications Commission (FCC) for approving stutter dial tone detection devices and ADSL modems. It was developed in accordance with TIA/EIA procedural guidelines and represents the consensus position of the Working Group and its parent Subcommittee, which served as the formulating group. It has also received the concurrence of Engineering Committee TR-41, User Premises Telecommunications Requirements.

Working Group TR-41.9.1 acknowledges the contribution made by the following individuals in the development of this interim standard.

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1. SCOPE

This standard provides supplemental criteria for connecting stutter dial tone detection devices and ADSL modems to the telephone network in accordance with 47 CFR 68. These two types of terminal equipment are not fully compliant with TIA/EIA-IS-968, *Telecommunications – Telephone Terminal Equipment – Technical Requirements for Connection of Terminal Equipment to the Telephone Network*. This standard identifies the clauses of TIA/EIA-IS-968 that stutter dial tone detection devices and ADSL modems do not meet and provides alternate criteria for each. Equipment that complies with these supplemental criteria and all other applicable criteria is not expected to cause harm to the telephone network.

In accordance with ANSI guidelines, two categories of specifications are used in this standard, mandatory requirements and recommendations. Mandatory requirements are designated by the word "shall" and recommendations by the word "should".

2. NORMATIVE REFERENCES

The following standards contain provisions that, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

TIA/EIA-IS-968, *Telecommunications – Telephone Terminal Equipment – Technical Requirements for Connection of Terminal Equipment to the Telephone Network*.

ANSI T1.413-1998, *Telecommunications – Network and Customer Installation Interfaces – Asymmetric Digital Subscriber Line (ADSL) Metallic Interface*.

3. ACRONYMS AND DEFINITIONS

For the purposes of this Standard, the following acronyms and definitions apply:

3.1 Acronyms

ADSL – Asymmetric Digital Subscriber Line

3.2 Definitions

ADSL modem – a modem having transmit signal characteristics meeting the spectral response and aggregate power level limitations of this standard. The term should be interpreted to include variations such as splitterless ADSL and Rate Adaptive DSL (RADSL) modems that have similar transmit signal characteristics meeting these limitations.

Stutter dial tone – interrupted dial tone. Typically, the cadence is 0.1 s on, 0.1 s off and the interruptions are only for the first few seconds of dial tone. Stutter dial tone is used to provide an audible signal to the equipment user in support of certain network features.

Stutter dial tone detection device – terminal equipment that is designed to automatically go off-hook and determine the presence or absence of stutter dial tone.

4. STUTTER DIAL TONE DETECTION DEVICES

Terminal equipment that automatically goes off-hook for the purpose of checking for stutter dial tone does not comply with Clause 4.7.8 of TIA/EIA-IS-968. However, a stutter dial tone detection device shall be acceptable for connection to the telephone network provided it meets all other applicable requirements and all of the following specifications and conditions:

(i). the device performs no periodic testing for stutter dial tone;

(ii). the device makes an off-hook stutter dial tone check no more than once after a subscriber completes a call, and completes the check no earlier than 4 seconds after the subscriber hangs-up;

(iii). the device makes an off-hook stutter dial tone check after an unanswered call no more than once;

(iv). the device performs no off-hook stutter dial tone check after an unanswered incoming call if the visual message indicator is already lit;

(v). the device takes the line off-hook for no more than 2.1 seconds per stutter dial tone check. Since the equipment cannot begin checking for stutter dial tone until dial tone is present, this 2.1 second interval begins when dial tone is applied to the line. If dial tone is not applied within 3 seconds, the equipment should abandon the stutter dial tone check;

(vi). the device synchronizes off-hook checks when multiple stutter dial tone detection and visual signaling devices are attached to the same line so that only one check is made per calling event for a single line;

(vii). the device does not block dial tone to a subscriber attempting to initiate a call as an off-hook stutter dial tone detection check is occurring; and,

(viii). the device does not use more than 8 micro-amps of direct current (DC) from subscriber line loop, except that the device may draw loop DC sufficient to make authorized off-hook checks.

5. ADSL MODEMS

ADSL modems do not comply with the signal power requirements of Clause 4.5.5.1 of TIA/EIA-IS-968. However, an ADSL modem shall be acceptable for connection to the telephone network provided it meets all other applicable requirements and all of the following specifications and conditions:

(i). the modem meets the transmitter spectral response requirements specified in Section 7.14 of T1.413-1998, and

(ii). the modem operates with an aggregate power of less than 12.5 dBm over the range 25.875 to 138 kHz as specified in Section 7.15 of T1.413-1998.