ANSI/TIA/EIA-662.013-1998
Approved: October 28,1998

TIA/EIA STANDARD

Personal Wireless Telecommunications Interoperability Standard (PWT) - Part 13 – Data Services Access Profiles A and B Class 1

TIA/EIA-662.013

NOVEMBER 1998

TELECOMMUNICATIONS INDUSTRY ASSOCIATION

TELECOMMUNICATIONS INDUSTRY ASSOCIATION

Representing the telecommunications industry in association with the Electronic Industries Alliance

Electronic Industries Alliance

NOTICE

TIA/EIA Engineering Standards and Publications are designed to serve the public interest through eliminating misunderstandings between manufacturers and purchasers, facilitating interchangeability and improvement of products, and assisting the purchaser in selecting and obtaining with minimum delay the proper product for his particular need. Existence of such Standards and Publications shall not in any respect preclude any member or nonmember of TIA/EIA from manufacturing or selling products not conforming to such Standards and Publications, nor shall the existence of such Standards and Publications preclude their voluntary use by those other than TIA/EIA members, whether the standard is to be used either domestically or internationally.

Standards and Publications are adopted by TIA/EIA in accordance with the American National Standards Institute (ANSI) patent policy. By such action, TIA/EIA does not assume any liability to any patent owner, nor does it assume any obligation whatever to parties adopting the Standard or Publication.

This Standard does not purport to address all safety problems associated with its use or all applicable regulatory requirements. It is the responsibility of the user of this Standard to establish appropriate safety and health practices and to determine the applicability of regulatory limitations before its use.

(From Standards Proposal No. 4079, formulated under the cognizance of the TIA TR-41.6.1 Working Group of the 41.6 Subcommittee on Wireless User Premises Equipment Systems).

Published by

©TELECOMMUNICATIONS INDUSTRY ASSOCIATION 1998
Standards and Technology Department
2500 Wilson Boulevard
Arlington, VA 22201

PRICE: Please refer to current
Catalog of EIA, JEDEC, and TIA STANDARDS and ENGINEERING PUBLICATIONS
or call Global Engineering Documents, USA and Canada (1-800-854-7179)
International (303-397-7956)

Contents

FOREWORD

This Wireless Interoperability Standard was developed by the TR41.6 Standards Formulating Sub-Committee of the Telecommunications Industry Association.

This section covers the Data Services Access Profiles A and B Class 1. See [4] ANSI/TIA/EIA 662-4 for class 1 definition.

This standard is based in large part on ETSI 300 175 (DECT). Changes have been made to conform to North American national regulations, market conditions, and telephone requirements. An intent of this standard is to maintain a high degree of commonality with the ETSI Standard ETS 300 175, known as DECT. This section maintains a high degree of commonality with the Data Services Access Profile standard [18] ETS 300 435. Further details of the DECT system may be found in the ETSI Technical Reports, ETR 015 [14] and ETR 043 [13], and also in the ETR 056 Technical Report, "Digital Enhanced Cordless Telecommunications; System Description Document" [13].
In addition refer to [18] ETSI 300 435 which is entitled in part "Base standard including inter-working to connectionless networks (services types A and B, class 1)".

1 SCOPE

This section defines profiles for Personal Wireless Telecommunications (PWT) Interoperability Standard conforming to ANSI/TIA/EIA 662 1998 [1] to [9]. It is part of a family of profiles that build upon and extend each other, aimed at the general connection of terminals supporting non-voice services to a fixed infrastructure, private and public.

This section specifies a generic frame relay service for use within closed user groups (CUG, see section 3 Definitions and Abbreviations). This service is used by other Data Services Profile (DSP) standards when providing inter-working to levels above the Medium Access Control (MAC) layer of the attached network. Annex B contains inter-working conventions to specific attached data networks. This includes inter-working to the MAC layer of international standard connectionless Local Area data Networks (LANs) ISO 8802.3, Ethernet and ISO 8802.5 Token Ring.

This section defines both Type A and Type B services. Type A is a low speed frame relay, with net sustainable throughput of up to 24 kb/s, optimized for burst data, low power consumption and low complexity applications such as hand-portable equipment. Service Type B is a high-speed frame relay, with a net sustainable throughput of up to 552 K/bits, optimized for high speed and low latency with burst data. Both are fully compatible and can inter-work with each other.

This standard defines the requirements on the Physical (PHL), MAC, Data Link Control (DLC) and Network (NWK) layers of PWT.

This section also specifies Management Entity (ME) requirements and generic inter-working conventions that ensure the efficient use of the PWT frequency spectrum.

2 NORMATIVE REFERENCES

This ANSI/TIA/EIA Standard incorporates, by dated or 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 section only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to apply.

[1] ANSI/TIA/EIA 662-1-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 1: Overview."

[2] ANSI/TIA/EIA 662-2-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 2: Physical layer."

[3] ANSI/TIA/EIA 662-3-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 3: Medium access control layer."

[4] ANSI/TIA/EIA 662-4-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 4: Data link control layer."

[5] ANSI/TIA/EIA 662-5-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 5: Network layer."

[6] ANSI/TIA/EIA 662-6-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 6: Identities and addressing."

[7] ANSI/TIA/EIA 662-7-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 7: Security features."

[8] ANSI/TIA/EIA 662-8-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 8: Speech coding and transmission."

[9] ANSI/TIA/EIA 662-9-1998: "Personal Wireless Telecommunications (PWT) Interoperability Standard Part 9: Customer Premises access profile."

[10] TBR 006: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); General terminal attachment requirements".

[11] I-ETS 300 176: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT); Approval test specification".

[12] CEPT Recommendation T/SGT SF2 (89) 6/0 "Draft Recommendation T/SF Services and Facilities od Digital Enhanced Cordless telecommunications".

[13] ETR 043 "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT) Common interface. Services and Facilities requirement specification".

[14] ETR 015: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT) Reference document". [15] ETR 056: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT) System description document". [16] ETR 042: "Radio Equipment and Systems (RES); Digital Enhanced Cordless Telecommunications (DECT) A guide to the DECT features that influence the traffic capacity and the maintenance of high radio link transmission quality, including the results of simulations".