

CEA Bulletin

Recommended Practice for
Transmitter Control and Status
Indication in Transmitting Portable
Electronic Devices (T-PEDs)

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Foreword

This Recommended Practice is VOLUNTARY. It is not intended, nor anticipated, that this Recommended Practice will be adopted by regulatory agencies to establish mandatory compliance requirements for T-PEDs. It is instead intended that the following Recommended Practice be made available for adoption by relevant industries or private stakeholders (e.g., airlines, healthcare facilities) to be incorporated into their policies related to sensitive environments.

This Recommended Practice was developed under the auspices of CEA, in conjunction with allied organizations in related industries. This document was prepared in liaison with RTCA Special Committee 202, the European Telecommunications Standards Institute (ETSI), and members of the air transport and consumer electronics industries.

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Recommended Practice

for Transmitter Control and Status Indication

in Transmitting Portable Electronic Devices (T-PEDs)

1 Introduction

1.1 Scope

This Recommended Practice sets forth a series of PROVISIONS that collectively constitute a FEATURE SET outlining TERMINOLOGY and INDICATORS to determine TRANSMIT and OPERATIONAL STATUS of Transmitting Portable Electronic Devices (T-PEDs) and facilitate ease of operation in controlling transmitters in T-PEDs to aid in managing their use in sensitive electronic environments. For the purposes of this Recommended Practice, T-PEDs are considered to be handheld mobile communication or computing devices for sale to the general public that intentionally transmit a radiofrequency (RF) wireless signal.

This Recommended Practice outlines inter-related PROVISIONS that together constitute a FEATURE SET, where the features are understood to be implemented collectively and in their entirety for all wireless technologies used in a product. Conformance assumes satisfaction of all PROVISIONS in the FEATURE SET collectively, and non-conformance assumes any one or more of the PROVISIONS have not been satisfied.

This Recommended Practice addresses wireless technologies that are defined in technical and/or industry standards and widely available in consumer products (e.g., CMRS / cellular network systems, WiFi, Bluetooth). Developing wireless technical standards or wireless technologies not yet common in consumer products (e.g., UWB, 802.15.4, WMTS) are not addressed in this revision, but they are mentioned and might be addressed in subsequent revisions. Wireless technologies as described in this Recommended Practice are broadly classified into categories; it is not the intention here to provide a detailed description of the RF signal or technology subtype¹. Infrared transmitters and receivers are not covered by this Recommended Practice.

¹ Different wireless technology subtypes within a given category (e.g., CMRS / cellular network systems, WiFi, Bluetooth) may have distinct signal characteristics, capacity support, dynamic power level control, and dynamic frequency selection that may directly or indirectly influence their electromagnetic interaction with neighboring sensitive electronic equipment. It is not the purpose of this Recommended Practice to provide a detailed description of wireless technologies. In addition, the complexity of defining terminology and indicators to specify each possible technology subtype would defeat the purpose of a simple, clear, and consistent set of terminology and indicators for T-PED transmit status. For instance, it is understood that operation of WiFi may involve different subtypes including 802.11a that operates in the 5.1 – 5.8 GHz band and 802.11b/g that operates in the 2.4 – 2.5 GHz band. Many laptop computers and WiFi add-on cards are enabled to operate on both frequency bands using 802.11a/b/g. It is also understood that operation of CMRS from T-PED handsets in the USA may include different frequency bands (806-824 MHz, 824 – 849 MHz, 1850 – 1910 MHz) as well as different signal types (analog, GSM, CDMA, iDEN). Additional “cellular” frequency bands exist in Europe (890 - 915 MHz, 1750 –