## ECMA

EUROPEAN COMPUTER MANUFACTURERS ASSOCIATION

## STANDARD ECMA-83

SAFETY REQUIREMENTS FOR DTE-TO-DCE INTERFACE IN PUBLIC DATA NETWORKS

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#### BRIEF HISTORY

An initiative by ECMA resulted in a joint study in CEPT (Conference of European Posts and Telecommunications Administrations), conducted by rapporteurs from each organization on the mutual requirements for safety. The first outcome of this study is the present ECMA Standard, published simultaneously as a CEPT Recommendation. It relates to the interface between a DCE (modem) and a DTE (terminal) in Public Data Networks, and is intended that further related agreements will be published later.

The text of the preface to the CEPT Recommendation is reproduced below for information.

Recommendation T/CD 04/03; Safety requirements for the DTE - DCE interface in Public Data Networks.

The Conference of European Postal and Telecommunications Administrations,

Considering,

That harmonization of safety requirements has been studied by GT/CD in co-operation with the European Computer Manufacturers Association (ECMA),

Recommends,

That the following requirements be used in future DTE "Permission to Connect" procedures by CEPT Administrations and for the specification of DCEs by these Administrations.

This Recommendation is the subject of further study and possible amendment.

NOTE: The articles of CEPT do not impose an obligation on member Administrations to apply the Recommendations of the Conference.

#### 1. SCOPE

This Standard ECMA-83 specifies requirements to prevent electric shock hazards from arising at, or passing in either direction through, the interface connector between Data Terminal Equipment (DTE) and Data Circuit Terminating Equipment (DCE) in Public Data Networks.

The general safety of the equipment (e.g. for the operator) is not covered by this Standard, which is based on the assumption that the equipment meets the relevant standards for this purpose.

The certification procedure, that is the way in which it is certified that a specific equipment design meets the requirements specified, is also not covered by this Standard.

The requirements for the connection points of a DCE to the telecommunication network with regard to safety on this network are covered by CEPT Recommendation  $T/CD\ 1-1$ .

Administrations may require precautions in addition to this Recommendation when the DTE-to-DCE interconnection is to be established via PTT wiring.

### 2. REFERENCES

IEC Publication 435 (IEC 435)

ECMA-57

CEPT Recommendation T/CD 1-1

Safety of data processing equipment.

Safety Requirements for Data Processing Equipment

General engineering requirements for data circuit terminating equipment for analogue and digital networks.

#### 3. REQUIREMENTS

Under normal working conditions, the voltage between any two interchange circuits or between one interchange circuit and earth shall not exceed the limits for ELV, and insulation between these circuits and hazardous voltages in DTE and DCE shall be at least Basic insulation.

For definition of "ELV" and "Basic insulation" reference is made to IEC 435. In general, the edition of IEC 435 which is applicable is the last one published. However when a revision occurs, compliance with either the latest edition or an earlier edition is acceptable during an interim period.

The connection of other equipment to a DTE or DCE shall not invalidate the above requirements.

