



**SLOVENSKI STANDARD**  
**SIST ETS 300 019-1-5 E1:2006**

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**Inženiring opreme (EE) – Okoljski pogoji in preskusi vplivov okolja na telekomunikacijsko opremo – 1-5. del: : Klasifikacija okoljskih pogojev – Inštalacije v kopenskih vozilih**

Equipment Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment; Part 1-5: Classification of environmental conditions; Ground vehicle installations

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**ICS:**

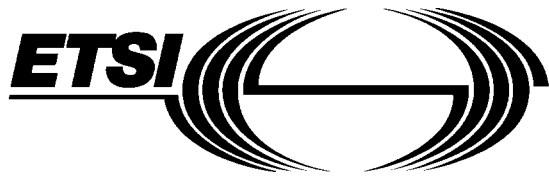
19.040	Preskušanje v zvezi z okoljem	Environmental testing
33.050.01	Telekomunikacijska terminalna oprema na splošno	Telecommunication terminal equipment in general

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Part 1-5: Classification of environmental conditions  
Ground vehicle installations**

**ETSI**

European Telecommunications Standards Institute

**ETSI Secretariat**

**Postal address:** F-06921 Sophia Antipolis CEDEX - FRANCE

**Office address:** 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

**X.400:** c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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## Foreword

This multi-part European Telecommunication Standard (ETS) has been produced by the Equipment Engineering (EE) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This standard is concerned with environmental conditions and environmental tests for telecommunications equipment and comprises two main parts, each with subdivisions:

- ETS 300 019-1: "Classification of environmental conditions".

This part of the standard, Part 1, specifies different standardised environmental classes covering climatic and biological conditions, chemically and mechanically active substances and mechanical conditions during storage, transportation and in use.

- ETS 300 019-2: "Specification of environmental tests".

This part of the standard will specify the test requirements for the different environmental classes.

Each part of the standard is divided into sub-parts. Sub-part 1-0 will form a general overview of Part 1. This sub-part, Sub-part 1-5, deals with ground vehicle installations.

This part of the standard (Part 1) was submitted to Public Enquiry as prETS 300 019 Part B. The original Part A is to be published as ETSI Technical Report ETR 035 entitled: "Equipment Engineering (EE); Environmental engineering Guidance and terminology".

Annex A to this sub-part is normative.

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## 1 Scope

The purpose of this sub-part of this standard is to define the classes of environmental conditions and their severities to which equipment may be exposed in ground vehicles. Only severe conditions, which may be harmful to the equipment, are included. The severities specified are those which will have a low probability of being exceeded; generally less than 1 .

This sub-part applies to equipment when in use and permanently or temporarily installed in ground vehicles.

## 2 Normative references

This ETS contains, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] ETR 035: "Equipment Engineering (EE); Environmental engineering Guidance and terminology".
- [2] IEC Publication 721-3-5: "Ground vehicle installations".
- [3] IEC Publication 721-2-1: "Temperature and humidity".
- [4] IEC Publication 68-2-27: "Test Ea : Shock".

## 3 Definitions

In this sub-part the following definitions apply:

**Internally mounted:** The equipment is mounted internally in the vehicle in a compartment which affords some protection from the environment. The protection ranges from complete isolation from external influences to protection only from precipitation when the vehicle is not moving.

**Externally mounted:** The equipment is mounted on the outside of the vehicle. It is not protected from any external influences.

**Weatherprotected location:** A location at which the vehicle is protected from direct weather influences. The locality is assumed to be reasonably ventilated (at least natural flow).

## 4 Environmental classes

The classes shown in parentheses, e.g. (5S1), may be selected for special applications.

### 4.1 Class 5.1: Protected installation

This class is a combination of classes 5K2/5B2/5C2(5C3)/5F1(5F2)/5S2(5S1)/5M2 or 5M3 in IEC Publication 721-3-5 [2].

This class applies to equipment in vehicles used at weatherprotected and heated locations covered by world-wide open-air climates excluding extremely warm dry climates.

At non-weatherprotected locations this class applies to equipment in ventilated compartments and in the engine compartments of vehicles powered by electric motors in climatic conditions with normal rain intensities but excluding extremely cold, cold, cold temperate and extremely warm dry climates.

NOTE 1: For some environmental parameters (low air temperature, high air temperature) this class also covers externally mounted equipment.