

ICS 33.060.01

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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14733.9-2008

Replacing GB/T 14733.9-1993

Terminology for telecommunication -- Radio wave propagation

电信术语 无线电波传播

(English Translation)

Issued on: August 6, 2008

Implemented on: March 1, 2009

Issued by: Standardization Administration of China

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Foreword

GB/T 14733 "Telecommunication term" divided into the following 12 sections.

- Part 1. Telecommunications, channels and networks;
- Part 2. Transmission lines and waveguides;
- Part 3. Reliability, maintainability and quality of service;
- Part 4. switching technology;
- Part 5. Using the discrete signals, telegraphy, facsimile and data communications;
- Part 6. space radio communication;
- Part 7. oscillations, signals and related devices;
- Part 8. Telephone;
- Part 9. radio wave propagation;
- Part 10. antenna;
- Part 11. Transfer;
- Part 12. optical fiber communication.

This section GB/T 14733 Part 9, equivalents, using IEC 60050 (705) "International

Electrotechnical Vocabulary Chapter 705. Radio Wave Propagation "(in English).

This Part replaces GB/T 14733.9-1993 "term telecommunications radiowave propagation."
Section compared with the GB/T 14733.9-1993 The main changes are as follows.

--- This part of the increase 2 new entries and definitions of terms, an increase of 5 synonymous with the term of the 17 were Chinese Terms Modify, and define 86 terms were modified.

--- The preparation of the format of this section has been modified.

This part is proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part of the jurisdiction of the China Communications Standards Association.

This section drafted by. Ministry of Information Industry Telecommunications Research Institute.

1 Scope

This section provides terms and definitions of radio wave propagation.

This section applies to telecommunications technology.

2 Terms and definitions

2.1

the basic characteristics of electromagnetic fields and waves 705-01-01 A scalar, vector or tensor, which is a function of the coordinates of the point in a predetermined space, and may be a function of time.

Note: A field can represent a physical phenomenon, such as. field sound pressure field, gravity field, Earth's magnetic field and radio waves.

705-01-02

In the case of the material does not move, the energy transfer between the two points.

NOTE: For example in the propagation of electromagnetic energy space, heat propagation along the rod.

705-01-03

Changes in the physical condition of the medium characterized by the field, and by the characteristics of the medium at each point in each direction and the determined speed.

Note 1: The wave is composed of a series of local actions or produce such action.

Note 2: The wave propagation can only be portrayed by those who can use the field represented by

hyperbolic partial differential equations. For example, in the form of electromagnetic waves can propagate in space, but no definite heat propagation velocity of the rod, so not wave propagation.

705-01-04

Wave propagation in terms of representation at the point of a given moment and a given space, a given property field within the specified time interval Than the displacement vector and the time interval duration, the limit goes to zero when the duration.

Note: With the selected feature, you can define different classes of speed, for example. the phase velocity, group velocity, whose value depends on point and the direction considered.

705-01-05

Of wave propagation in a specified source instant start being issued is concerned, it is now under the waves and yet that region of space the major impact of the wave to a separate surface area.

NOTE: When the propagation along a surface or along a line, the wavefront is defined by a line or a point, respectively.

705-01-06

In the propagation of a specified source instant termination occurred wave is concerned, it is now under the waves of the spatial region and is no longer the major impact of the wave to a separate surface area.

NOTE: When the propagation along a surface or a line, the wavefront is defined by a line or a point, respectively.

705-01-07

State of matter characterized medium or vacuum electric, magnetic field, is defined by the following four vector set.

GB/T 14733.9-2008/IEC 60050 (705).1995