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

GB/T 16263.2-2025

Replacing GB/T 16263.2-2006

**Information technology - ASN.1 encoding rules - Part 2:
Specification of Packed Encoding Rules (PER)
(English Translation)**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 2 of GB/T 16263 "Information Technology ASN.1 Coding Rules". GB/T 16263 has published the following part.

- Part 1: Specifications of Basic Encoding Rules (BER), Regular Encoding Rules (CER) and Untypical Encoding Rules (DER);
- Part 2: Specification of Restricted Encoding Rules (PER);
- Part 4: XML Encoding Rules (XER);
- Part 5: Mapping of W3C XML Schema Definitions to ASN.1.

This document replaces GB/T 16263.2-2006 "Information Technology ASN.1 Coding Rules" and is consistent with GB/T 16263.2-2006.

In addition to structural adjustments and editorial changes, the main technical changes are as follows.

- Increased the scope of application of the tightened coding rules (see Chapter 1);
- Added the definition of PER encoding instruction (see 3.6);
- Changed the content of non-negative binary integer encoding (see 3.7.20, 3.6.20 of the 2006 edition);
- Added PER encoding instruction (see Chapter 9);
- Changed the way the complete code is generated during the encoding process (see 11.1, 10.1 of the 2006 edition);
- Changed the encoding rules of bit string types (see 16.6, 15.6 of the 2006 edition);
- Changed the encoding rules of octet string types (see 17.3, 16.3 of the 2006 edition);
- Added encoding of internationalized resource reference types (see Chapter 26);

- Added the encoding of relevant international resource reference types (see Chapter 27);
- Changed the encoding rules for restricted string types (see 30.4, 30.6.1, 30.6.3, 27.4, 27.6.1, 27.6.3 of the 2006 edition);
- Added the encoding of time types, valid time types, defined time types and additional time types (see Chapter 32);
- Changed the expression of the encoding rules of the object identifier of the transfer syntax (see 33.2, Chapter 29 of the 2006 edition);
- Changed the title of Appendix F and the text of the text (see Appendix F, Appendix F of the 2006 edition).

This document is equivalent to ISO/IEC 8825-2:2021 "Information technology ASN.1 encoding rules Part 2: Condensed encoding rules" (PER) Specification.

Introduction

GB/T 16262.1-2025, GB/T 16262.2-2025, GB/T 16262.3-2025 and GB/T 16262.4-2025 Describes Abstract Syntax Notation One (ASN.1), which defines messages exchanged between peer applications.

The encoding rules defined in this document apply to type values determined using the notation specified in GB/T 16262.1-2025.

The encoding rules generate the transfer syntax for these values. These encoding rule specifications also implicitly apply to decoding.

There are multiple sets of encoding rules for ASN.1 type values. This document defines the Permitted Encoding Rules (PER).

It is a set of condensed coding rules because this set of coding rules is more comprehensive than the basic coding rules described in GB/T 16263.1-2025.

(BER) and its derived encoding rules are more compact. GB/T 16263.1-2025 is a compact encoding rule specification for some parts.

refer to.

GB/T 16263 is planned to consist of eight parts.

--- Part 1: Basic Encoding Rules (BER), Regular Encoding Rules (CER) and Untypical Encoding Rules (DER) specifications.

To specify a set of basic encoding rules.

--- Part 2: Specification of the compressed encoding rules (PER). The purpose is to specify a set of compressed encoding rules.