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

GB/T 16681-2003

Replacing GB/T 16681-1996

**Information technology--Chinese interface specifications of
open system**

信息技术 开放系统中文界面规范

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Foreword

This document was issued on 24 November 2003 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China, and took effect on 1 August 2004.

It replaces GB/T 16681-1996, Information technology - Chinese interface specification of open system. The main changes are as follows:

1. The 77 functions in 16 classes forming the character interface part of the internationalisation functions of the previous edition, which followed UNIX SVR4.0, have been revised against ISO/IEC 9899:1990/Amd.1:1995, Programming languages - C, Amendment 1: C Integrity.
2. The graphical interface functions of the previous edition were based on X11R5 and were out of date; they have been redrafted on X11R6, with reference to a number of implementations.
3. Annex A of the previous edition was a POSIX Chinese locale definition file based on GB 2312-1980. The State now requires the character set of a Chinese system to be based on GB 18030-2000, so a POSIX Chinese locale definition file based on GB 18030-2000 has been prepared and placed in Annex A as a formal part of this document.
4. Several dozen internationalisation character-interface functions specified in LI18NUNIX2000 but absent from the previous edition have been added, with reference to Linux; they are placed in Annex C.

Annex A is normative; Annexes B and C are informative.

This document was proposed by the Ministry of Information Industry of the People's Republic of China and is under the jurisdiction of the Electronic Industry Standardization Institute of that Ministry.

It was drafted by China Soft Network Technology Co. Ltd and the Electronic Industry Standardization Institute.

Classification: ICS 35.060, CCS L74.

1 Scope

This document defines the application programming interface, the I/O service function interface and the graphical interface of a Chinese platform for open systems.

It applies to the development and application of Chinese platforms for open systems and to the integration of Chinese-processing software based on such an environment.

2 Normative references

The following documents contain provisions which, through reference in this text, constitute provisions of this document. For dated references, subsequent amendments (excluding corrections) or revisions do not apply; parties are nevertheless encouraged to examine whether the latest editions may be used. For undated references, the latest edition applies.

GB/T 1988-1998 Information processing - 7-bit coded character set for information interchange (eqv ISO 646:1991)

GB 2312-1980 Code of Chinese graphic character set for information interchange - Primary set

GB/T 5261-1994 Information processing - Control functions for 7-bit and 8-bit coded character sets (idt ISO 6429:1988)

GB/T 7408-1994 Data elements and interchange formats - Information interchange - Representation of dates and times (eqv ISO 8601:1988)

GB/T 11383-1989 Information processing - 8-bit code structure and coding rules for information interchange (idt ISO 4873:1986)

GB 12345-1990 Code of Chinese ideogram set for information interchange - Supplementary set

GB 13000.1-1993 Information technology - Universal multiple-octet coded character set (UCS) - Part 1 (idt ISO/IEC 10646-1:1993)

GB/T 13846-1992 Vector Chinese characters for graphic information interchange - Fangsong typeface

GB/T 13847-1992 Vector Chinese characters for graphic information interchange - Kaiti typeface

GB/T 13848-1992 Vector Chinese characters for graphic information interchange - Heiti typeface

GB/T 14246.1-1993 Information technology - Portable operating system interface - Part 1: System application program interface (POSIX.1) (idt ISO/IEC 9945-1:1990)

GB/T 15272-1994 Programming languages - C (idt ISO/IEC 9899:1990)

GB 18030-2000 Information technology - Chinese ideograms coded character set for information interchange - Extension for the basic set

ISO/IEC 9945-2:1993 (POSIX.2) Information technology - Portable operating system interface - Part 2: Shell and utilities

XBD5 Single UNIX Specification, Version 2, System Interface Definitions, Issue 5 (The Open Group CAE Specification C605)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Multibyte character

A character represented by several bytes.

3.2 Single-byte character

A character represented by one byte.

3.3 Wide character

A character of a fixed width, used for internal processing.