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INTERNATIONAL STANDARD

ISO/IEC 13346-2

Second edition
1999-06-01

Information technology — Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange —

Part 2:
Volume and boot block recognition

Technologies de l'information — Structure de volume et de fichier de moyens d'écriture unique et de réécriture utilisant un enregistrement non séquentiel pour l'échange d'information —

Partie 2: Reconnaissance de volume et de «boot block»

Reference number
ISO/IEC 13346-2:1999(E)

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialised system for worldwide standardisation. National Bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organisation to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organisations, governmental and non-governmental, in liaison with ISO and IEC, also take part in this work.

In the field of information technology, ISO and IEC have established a Joint Technical Committee, ISO/IEC JTC 1. Draft International Standards adopted by the Joint Technical Committee are circulated to National Bodies for voting. Publication of an International Standard requires approval by at least 75% of the national bodies casting a vote.

International Standard ISO/IEC 13346-2 was prepared by ECMA, (as Standard ECMA-167) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by National Bodies of ISO and IEC.

This second edition cancels and replaces the first edition (ISO/IEC 13346-2:1995), which has been technically revised.

ISO/IEC 13346 consists of the following parts, under the general title *Information technology — Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange*:

— *Part 1: General*

— *Part 2: Volume and boot block recognition*

— *Part 3: Volume structure*

— *Part 4: File structure*

— *Part 5: Record structure*

Annex A of this part of ISO/IEC 13346 is for information only.

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Introduction

ISO/IEC 13346 is a volume and file structure standard for interchanging files and as such, it is a peer to existing volume and file structure standards such as ISO 9293 and ISO 9660. It is rather different from those standards in at least two important ways. Firstly, it offers much more functionality, mainly because of user needs for increased character set support and for more powerful file system features. Secondly, it acknowledges the separate concerns of booting, volume structure and file system structure. Rather than bundling these different functions together, ISO/IEC 13346 carefully segregates these functions into separate parts and describes in detail how those parts fit together. It is expected that future volume and file structure standards will fit into this framework, rather than building other distinct and incompatible formats.

ISO/IEC 13346 is published in five Parts. Part 1 - general - specifies references, definitions, notations and basic structures used in the other four Parts. Part 2 - volume and boot block recognition - specifies formats and system requirements for recognising the volume structures on a medium and booting from a medium. Part 3 - volume structure - specifies how to record various volume-related entities such as volumes, volume sets and logical volumes. Part 4 - file structure - specifies how to record and interpret files, both file data and file attributes, and file hierarchies within logical volumes. Part 5 - record structure - specifies how to record and interpret file data encoded as records.

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Information technology — Volume and file structure of write-once and rewritable media using non-sequential recording for information interchange —

Part 2:
Volume and boot block recognition

1 Scope

This part of ISO/IEC 13346 specifies a format and associated system requirements for volume and boot block recognition by specifying:

— volume recognition;

— boot descriptors intended for use to bring a system to a known state;

— levels of medium interchange;

— requirements for the processes which are provided within information processing systems, to enable information to be interchanged between different systems; for this purpose, this part of ISO/IEC 13346 specifies the functions to be provided within systems which are intended to originate or receive media which conform to this part of ISO/IEC 13346.