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**Information technology — Computer graphics —  
Interfacing techniques for dialogues with  
graphical devices (CGI) — Functional  
specification —**

**Part 3:**  
Output

*Technologies de l'information — Infographie — Interfaces pour  
l'infographie — Spécifications fonctionnelles —*

*Partie 3: Sortie*



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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the 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 as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 9636-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*.

ISO/IEC 9636 consists of the following parts, under the general title *Information technology — Computer graphics — Interfacing techniques for dialogues with graphical devices (CGI) — Functional specification*:

- *Part 1: Overview, profiles, and conformance*
- *Part 2: Control*
- *Part 3: Output*
- *Part 4: Segments*
- *Part 5: Input and echoing*
- *Part 6: Raster*

Annexes A and B form an integral part of this part of ISO/IEC 9636. Annexes C, D, E, F, G, and H are for information only.

## Introduction

This part of ISO/IEC 9636 describes the functions needed for generating and displaying graphical output.

The functional capability incorporated in this part of ISO/IEC 9636 is concerned with graphic primitives and their associated attributes, control over the graphic object output pipeline, and the rendering of graphic objects. It should at least be read in conjunction with the overview in ISO/IEC 9636-1, and the general control functions detailed in ISO/IEC 9636-2.

The functional capability described in this part of ISO/IEC 9636 applies to CGI Virtual Devices of class OUTPUT and OUTIN.



# **Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Functional specification –**

## **Part 3: Output**

### **1 Scope**

This part of ISO/IEC 9636 establishes those functions of the Computer Graphics Interface concerned with output primitives and associated attributes and controls for creating graphical pictures.

This part of ISO/IEC 9636 is part 3 of ISO/IEC 9636, and should be read in conjunction with ISO/IEC 9636-1 and ISO/IEC 9636-2. The relationship of this part of ISO/IEC 9636 to the other parts of ISO/IEC 9636 is described in ISO/IEC 9636-1 and in clause 4.

The functionality described in this part of ISO/IEC 9636 pertains to OUTPUT and OUTIN classes of CGI Virtual Device.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO/IEC 9636. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO/IEC 9636 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

- ISO 646 : 1983 *Information processing – ISO 7-bit coded character set for information interchange.*
- ISO 2022 : 1986 *Information processing – ISO 7-bit and 8-bit coded character sets – Code extension techniques.*
- ISO 8632-1 : 1987 *Information processing systems – Computer graphics – Metafile for the storage and transfer of picture description information (CGM) – Part 1: Functional specification.*
- ISO/IEC 9541-1 : -<sup>1)</sup> *Information technology – Font information interchange – Part 1: Architecture.*
- ISO/IEC 9541-2 : -<sup>1)</sup> *Information technology – Font information interchange – Part 2: Interchange format.*
- ISO/IEC 9541-3 : -<sup>1)</sup> *Information technology – Font information interchange – Part 3: Glyph shape representation.*
- ISO/IEC 9592-1 : 1989 *Information processing systems – Computer graphics – Programmer's Hierarchical Interactive Graphics System (PHIGS) – Part 1: Functional description.*
- ISO/IEC 9636-1 : 1991 *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Functional specification – Part 1: Overview, profiles, and conformance.*
- ISO/IEC 9636-2 : 1991 *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Functional specification – Part 2: Control.*
- ISO/IEC 9636-4 : 1991 *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Functional specification – Part 4: Segments.*
- ISO/IEC 9636-5 : 1991 *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Functional specification – Part 5: Input and echoing.*
- ISO/IEC 9636-6 : 1991 *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Functional specification – Part 6: Raster.*
- ISO/IEC 9637-1 : -<sup>1)</sup> *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Data stream binding – Part 1: Character encoding.*
- ISO/IEC 9637-2 : -<sup>1)</sup> *Information technology – Computer graphics – Interfacing techniques for dialogues with graphical devices (CGI) – Data stream binding – Part 2: Binary encoding.*
- ISO/IEC TR 9973 : 1988 *Information processing – Procedures for registration of graphical items.*

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<sup>1)</sup> To be published.