

INTERNATIONAL STANDARD

ISO/IEC
9636-1

First edition
1991-12-15

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

Part 1:

Overview, profiles, and conformance

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

Partie 1: Résumé, profils et conformité



Reference number
ISO/IEC 9636-1:1991(E)

ISO/IEC 9636-1 : 1991 (E)

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
1.1 Relationship of CGI to a computing environment	1
1.2 Position of CGI in a managed environment	2
2 Normative references	3
3 Definitions and abbreviations	4
3.1 Organization of the definitions	4
3.2 Definitions	4
3.3 Abbreviations	16
4 Reference models	18
4.1 Introduction	18
4.2 Model for CGI client/target relationships	18
4.2.1 CGI configurations diagram	18
4.2.2 Types of clients	20
4.2.3 Types of targets	20
4.3 Example configurations	21
4.3.1 CGI Virtual Devices as GKS workstations	21
4.3.2 CGM interpretation using CGI	22
4.3.3 CGI Virtual Devices as 3D workstations	22
4.3.4 Input/output workstations as combinations of CGI Virtual Devices	22
4.4 Relationship to other standards	24
4.4.1 Introduction	24
4.4.2 CGI data encodings standards	24
4.4.3 CGI language bindings standards	24
4.4.4 Relation to GKS (ISO 7942 1985)	24
4.4.5 Relation to GKS-3D (ISO 8805 1989) and PHIGS (ISO/IEC 9592 1989)	24
4.4.6 Relation to CGM (ISO 8632 1987)	25
4.4.7 Relation to Procedures for Registration of Graphical Items (ISO/IEC TR 9973 1988)	25
5 Concepts	26
5.1 Introduction	26
5.2 Global CGI concepts	26
5.2.1 CGI Graphic Object Pipeline	26
5.2.2 CGI state model	32
5.2.3 Description tables	32
5.2.4 State lists	32
5.2.5 Static and dynamic state lists	33
5.2.6 The structure of description tables and state lists	33
5.2.7 The principles of inquiry	33
5.2.8 Error philosophy	34
5.2.9 Method of describing functions	36
5.2.10 Data types employed	37
5.2.11 Formal grammar	39
5.3 Overview of ISO/IEC 9636-2 : Control	40
5.4 Overview of ISO/IEC 9636-3 : Output	40
5.5 Overview of ISO/IEC 9636-4 : Segments	40
5.6 Overview of ISO/IEC 9636-5 : Input and echoing	41
5.7 Overview of ISO/IEC 9636-6 : Raster	41

© ISO/IEC 1991

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

ISO/IEC Copyright Office • Case postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland