

INTERNATIONAL
STANDARD

ISO/IEC
15938-3

First edition
2002-05-15

**Information technology — Multimedia
content description interface —**

**Part 3:
Visual**

*Technologies de l'information — Interface de description du contenu
multimédia —*

Partie 3: Visuel

Reference number
ISO/IEC 15938-3:2002(E)



© ISO/IEC 2002

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2002

All rights reserved. Unless otherwise specified, 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 either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
1.1 Organization of the document	1
1.2 Overview of Visual Description Tools	1
2 Terms and Definitions	2
2.1 Default reference axis	2
2.2 DCT coefficients	2
2.3 Data element	3
3 Abbreviations and Symbols	3
3.1 General	3
3.2 Abbreviations	3
3.3 Arithmetic operators	3
3.4 Logical operators	3
3.5 Relational operators	3
3.6 Bitwise operators	4
3.7 Conditional operator	4
3.8 Assignment	4
3.9 Mnemonics	4
3.10 Constants	4
3.11 Functions	4
4 Conventions	5
4.1 Method of describing the DDL representation syntax	5
4.2 Method of describing the binary representation syntax	5
4.3 Method of describing the descriptor semantics	8
5 Basic structures	8
5.1 Introduction	8
5.2 Grid layout	8
5.3 Time series	11
5.4 Multiple view	15
5.5 Spatial 2D coordinates	16
5.6 Temporal interpolation	23
6 Color	29
6.1 Introduction	29
6.2 Color space	29
6.3 Color quantization	33
6.4 Dominant color	35
6.5 Scalable color	37
6.6 Color layout	42
6.7 Color structure	50
6.8 GoF/GoP Color	56
7 Texture	57
7.1 Introduction	57
7.2 Homogeneous texture	57
7.3 Texture browsing	61
7.4 Edge histogram	63
8 Shape	66
8.1 Introduction	66