# ISO 15930-7:2010-07 (E)

## Graphic technology - P repress digital data exchange using PDF - Part 7: Complete exchange of printing data (PDF/X-4) and partial exchange of printing data with external profile reference (PDF/X-4p) using PDF 1.6

## Contents

Page


Foreword ..... iv

Introduction ..... vi

1 Scope ..... 1

2 Normative references ..... 1

3 Terms and definitions ..... 2

4 Notations ..... 5

5 PDF/X-4 conforming files and equipment ..... 5

6 Technical requirements ..... 6
6.1 General ..... 6
6.2 Non-print elements ..... 7
6.3 Complete exchange ..... 7
6.4 Colour ..... 7
6.5 Fonts ..... 11
6.6 Encoding of name objects ..... 12
6.7 External and embedded files ..... 12
6.8 Stream filters ..... 13
6.9 Trapping ..... 13
6.10 Metadata and document identification ..... 13
6.11 PDF/X-4 file identification ..... 16
6.12 Bounding boxes ..... 16
6.13 Extended graphics state ..... 17
6.14 PostScript XObjects ..... 17
6.15 Use of encryption and access control ..... 17
6.16 Images ..... 17
6.17 Annotations ..... 18
6.18 Actions and JavaScripts ..... 18
6.19 Use of the BX/EX operators ..... 18
6.20 Use of transparency ..... 18
6.21 Viewer preferences ..... 19
6.22 Use of alternate presentations ..... 19
6.23 Rendering intents ..... 19
6.24 Use of optional content ..... 19
6.25 Architectural limits ..... 20
6.26 XFA forms ..... 20
6.27 JPEG2000 images ..... 20

Annex A (normative) Requirements for PDF/X-4p ..... 22

Annex B (informative) PDF feature summary ..... 24

Bibliography ..... 27