

ISO 15930-9:2020 (E)

Graphic technology — Prepress digital data exchange using PDF — Part 9: Complete exchange of printing data (PDF/X-6) and partial exchange of printing data with external profile reference (PDF/X-6p and PDF/X-6n) using PDF 2.0

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Notations
5	PDF/X-6 conforming files and processors
6	Technical requirements
6.1	General
6.2	Print and non-print elements
6.2.1	General
6.2.2	Print elements
6.2.3	Non-print elements
6.3	Intended visual appearance
6.4	Complete exchange
6.5	File structure
6.5.1	File header
6.5.2	File trailer
6.5.3	Cross reference table
6.5.4	Stream objects
6.5.4.1	General
6.5.4.2	Filters
6.5.5	Name objects
6.5.6	Permissions
6.5.7	Document catalog dictionary
6.6	Colour
6.6.1	General
6.6.2	Identification of characterized printing condition
6.6.2.1	Output intents
6.6.2.2	Gray characterizations
6.6.2.3	RGB characterizations
6.6.2.4	CMYK characterizations
6.6.3	Print element colour spaces
6.6.3.1	Indirect colour spaces
6.6.3.2	Device colour spaces
6.6.3.3	ICCBased colour spaces
6.6.3.4	Separation and DeviceN (including NChannel) colour spaces
6.7	Graphics
6.7.1	Content streams
6.7.2	Use of transparency
6.7.3	Extended graphics state
6.7.3.1	Transfer functions and halftoning
6.7.3.2	BlackPointCompensation
6.7.4	Images
6.7.4.1	General

- 6.7.4.2 Inline image dictionaries
- 6.7.4.3 JPEG2000 images
- 6.7.5 XObjects
- 6.8 Fonts
 - 6.8.1 General
 - 6.8.2 Embedded fonts
 - 6.8.2.1 General
 - 6.8.2.2 Subset embedding
 - 6.8.3 Use of .notdef glyph
 - 6.8.4 Font metrics
 - 6.8.5 Character encodings
- 6.9 Bounding boxes
- 6.10 Trapping
- 6.11 Metadata and document identification
 - 6.11.1 General
 - 6.11.2 Namespaces and prefixes
 - 6.11.3 Version and conformance level identification
 - 6.11.4 File identifiers
 - 6.11.5 File provenance information
- 6.12 Annotations
 - 6.12.1 General
 - 6.12.2 Annotation dictionaries
 - 6.12.3 Annotation appearances
- 6.13 Interactive forms
 - 6.13.1 General
 - 6.13.2 XFA forms
 - 6.13.3 Digital signatures
- 6.14 Actions
 - 6.14.1 General
 - 6.14.2 Handling of JavaScript actions
 - 6.14.3 Trigger events
 - 6.14.4 Handling of GoToR, GoToE, URI and SubmitForm actions
- 6.15 Use of optional content
- 6.16 Viewer preferences
- 6.17 Use of alternate presentations
- 6.18 Document requirements
- 6.19 Spectral Data (CxF)

Annex A (normative) Requirements for PDF/X-6p

- A.1 Requirements
- A.2 Output intent
- A.3 PDF/X-6p file identification

Annex B (normative) Requirements for PDF/X-6n

- B.1 General
- B.2 Output intent
- B.3 Source colour spaces and transparency
- B.4 PDF/X-6n file identification