

Annexure 4: Comparative Analysis of Storage Formats

Parameter	TIFF	PDF (ISO 32000-1)
Open and ISO Standard	Not an ISO standard. Privately held/controlled specification Platform independent	PDF: ISO 32000-1 standard PDF-A: ISO 19005-1: 2005 standard Platform independent
Reliable File Format	Numerous extensions to TIFF by both Adobe and 3rd parties make the file format incompatible and unreliable for consistent rendering of the content.	PDF Specification updated regularly by ISO. PDF-A exists for long term archiving of electronic data and consistency of content rendering.
File Size	Document size is limited by 4GB. Older compression schemes like CCITT G3, G4, JPEG supported.	No inherent limitation on document size. Modern compression schemes like JBIG2, JP2K supported. MRC compression possible
Longevity	TIFF viewers will be available for some time to come	For long term standards archiving, PDF-A is the best choice.
Searchability and Indexing	Only images can be stored. Not inherently searchable	Both text and image can be stored. Inherently searchable. Textual content can be accessed.
Security and Integrity of Documents	No security model.	Sophisticated security system Different kinds of security ensure granular levels of control over the document. Digital Signatures provide integrity of documents.
Document Structure and Navigation	Only Page sequencing No bookmark, hyperlink etc	Complete document structure is present Bookmark, hyperlink, annotation gives good user experience Mimics the real world document.
Support for Accessibility	No support for people with disabilities.	Document structure enables effective use of assistive technologies such as screen readers.
Quality of Presentation	Image quality compromised at higher resolution.	By virtue of storing fonts, quality of view and print is maintained at higher resolution.
Suitability for Web Delivery	No support of dynamic delivery over web	Linearized PDF is optimized for faster Web View.
Rich Meta Data	TIFF tags used to store simple metadata.	Conforms to the XMP specification.
Multiple Colour Support	Only one colour space per page	PDF page can have both B/W and colour image data
Associating similar documents	Multiple files cannot be assembled into an integrated unit.	A PDF Portfolio contains multiple files assembled into an integrated PDF. Documents which cater to similar things can be kept together.