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**Information technology — Digital  
compression and coding of continuous-  
tone still images: Registration of JPEG  
profiles, SPIFF profiles, SPIFF tags,  
SPIFF colour spaces, APPn markers,  
SPIFF compression types and  
Registration Authorities (REGAUT)**

**AMENDMENT 1: Application specific marker  
list**

*Technologies de l'information — Compression numérique et codage  
des images fixes de nature photographique: Enregistrement des profils  
JPEG, profils SPIFF, «SPIFF tags», espaces de couleur SPIFF,  
marqueurs APPn, types de compression SPIFF et autorités  
d'enregistrement (REGAUT)*

*AMENDEMENT 1: Liste de marqueurs pour application spécifique*

**PROOF/ÉPREUVE**

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Published in Switzerland

## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to ISO/IEC 10918-4 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*, in collaboration with ITU-T. The identical text is published as Rec. ITU-T T.86(1998)/Amd.1.

ISO/IEC 10918 consists of the following parts, under the general title *Information technology — Digital compression and coding of continuous-tone still images*:

- *Part 1: Requirements and guidelines*
- *Part 2: Compliance testing*
- *Part 3: Extensions*
- *Part 4: Registration of JPEG profiles, SPIFF profiles, SPIFF tags, SPIFF colour spaces, APPn markers, SPIFF compression types and Registration Authorities (REGAUT)*
- *Part 5: JPEG File Interchange Format (JFIF)*
- *Part 6: Application to printing systems*

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**INTERNATIONAL STANDARD**  
**ISO/IEC 10918-4:1999/Amd.1**  
**Rec. ITU-T T.86 (06/1998)/Amd.1**  
**ITU-T RECOMMENDATION**

**Information technology – Registration of JPEG profiles, SPIFF profiles, SPIFF tags, SPIFF colour spaces, APPn markers, SPIFF compression types, and Registration Authorities (REGAUT)**

**AMENDMENT 1**  
**Application specific marker list**

**1) 4.4.4**

*Add the following after 4.4.3:*

**4.4.4 Known Application Marker Usage**

Annex D contains a list of known Application Markers (APPn). The intended use of this list is to aid in the identification of APPn markers that are known to be commonly used.

**2) Annex D**

*Add the following after Annex C:*

**Annex D**

(This annex forms an integral part of this Recommendation | International Standard)

**D.1 Definitions**

**D.1.1 Identifier string:** The first m bytes of the application data AP<sub>i</sub> (for i = 1 to m) of an APPn marker segment containing a zero-terminated character string encoded according to Rec. ITU-T T.50 or ISO/IEC 646, generally intended to serve as a unique identifier for the APPn marker.

**D.2 Known Application Marker usage**

**D.2.1.1 Application Markers**

Table D.1 lists the known Application Markers code values. The table lists the APP markers, identifier strings and informative comments for each definition.

**Table D.1 – List of known APP Marker definitions**

Marker	Identifier String	Comment
APP0	JFIF	JPEG File Interchange Format
APP0	JFXX	Extended JFIF
APP0	CIFF	Camera Image File Format (used by some Canon models)
APP0	AVI1	JPEG AVI information
APP1	EXIF	Exchangeable Image File Format (including maker notes)
APP1	XMP	Extensible Metadata Platform (multi-segment)
APP1	QVCI	Casio QV-7000SX QVCI information
APP1	PIC	Accusoft Pegasus custom fields

APP2	ICC_PROFILE	International Color Consortium (multi-segment)
APP2	FPXR	FlashPix Ready (multi-segment)
APP2	MPF	Multi-Picture Format
APP2	PreviewImage	Samsung large preview (multi-segment)
APP3	Kodak Meta	Kodak Meta information (EXIF-like)
APP3	Stim	Stereo Still Image format
APP3	PreviewImage	Hewlett-Packard or Samsung (multi-segment) preview
APP4	Scalado	(presumably written by Scalado mobile software)
APP4	FPXR	FlashPix Ready in non-standard location (multi-segment)
APP4	PreviewImage	Continued Samsung preview from APP3
APP5	Ricoh RMETA	Ricoh custom fields
APP6	EPPIM	Toshiba PrintIM
APP6	NITF	National Imagery Transmission Format
APP6	HP TDHD	Hewlett-Packard Photosmart R837 TDHD information
APP7	NITF0003.A	NIFT directory data segment
APP8	SPIFF	Still Picture Interchange File Format
APP10	Comment	PhotoStudio Unicode Comment
APP11	DD	Still image extension
APP12	Picture Info	ASCII-based Picture Information
APP12	Ducky	Photoshop "Save for Web"
APP13	Photoshop IRB	Image Resource Block (multi-segment, includes IPTC)
APP13	Adobe CM	Adobe Color Management
APP14	Adobe	Adobe DCT filter
APP15	GraphicConverter	GraphicConverter quality

### 3) Bibliography

Add the following to the Bibliography:

- [1] ISO/IEC 646:1991, *Information technology – ISO 7-bit coded character set for information interchange*
- [2] ITU-T Recommendation T.50 (1992), *International Reference Alphabet (IRA) (Formerly International Alphabet No. 5 or IA5) – Information technology – 7-bit coded character set for information interchange (Former CCITT T.50 Recommendation)*

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