ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

T.86
Amendment 1
(06/2012)

SERIES T: TERMINALS FOR TELEMATIC SERVICES

Still-image compression – JPEG-1, Bi-level and JBIG

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

Recommendation ITU-T T.86 (1998) – Amendment 1

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For further details, please refer to the list of ITU-T Recommendations.

INTERNATIONAL STANDARD ISO/IEC 10918-4
RECOMMENDATION ITU-T T.86

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

Summary

Recommendation ITU-T T.86 | ISO/IEC 10918-4 provides for the unique registration of JPEG and SPIFF Profiles, SPIFF Tags, SPIFF colour Spaces, application-specific Markers, SPIFF Compression types and images registration authorities as defined in Rec. ITU-T T.81 | ISO/IEC 10918-1 and Rec. ITU-T T.84 | ISO/IEC 10918-3.

New Annex D contains a list of currently 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.

History

Edition	Recommendation	Approval	Study Group
1.0	ITU-T T.86	1998-06-18	8
1.1	ITU-T T.86 (1998) Amd. 1	2012-06-29	16

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at http://www.itu.int/ITU-T/ipr/.

INTERNATIONAL STANDARD
RECOMMENDATION ITU-T

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

1)   Clause 4.4.4

Add the following new clause after clause 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 application markers that are known to be commonly used.

2)   Annex D

Add the following new Annex D after Annex C:

Annex D

Application-specific marker list

(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_i (for i = 1 to m) of an application marker (APPn) 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   Application markers

Table D.1 lists the known application marker (APPn) code values. The table lists the APPn markers, identifier strings, and informative comments for each definition.

Table D.1 – List of known application marker (APPn) 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 Bibliography:

– 　　Recommendation ITU-T T.50 (1992), *International Reference Alphabet (IRA) (Formerly International Alphabet No. 5 or IA5) – Information technology – 7-bit coded character set for information interchange.*

　　ISO/IEC 646:1991, *Information technology – ISO 7-bit coded character set for information interchange.*

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