INTERNATIONAL STANDARD ISO/IEC 12087-5:1998
TECHNICAL CORRIGENDUM 2

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INTERNATIONAL ELECTROTECHNICAL COMMISSION • МЕЖДУНАРОДНАЯ ЭЛЕКТРОТЕХНИЧЕСКАЯ КОМИССИЯ • COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

Information technology — Computer graphics and image processing — Image Processing and Interchange (IPI) — Functional specification —

Part 5:
Basic Image Interchange Format (BIIF)

TECHNICAL CORRIGENDUM 2

Technologies de l'information — Infographie et traitement de l'image — Spécification fonctionnelle pour le traitement de l'image et l'échange (IPI) —

Partie 5: Format d'échange de l'image de base (BIIF)

RECTIFICATIF TECHNIQUE 2

Technical Corrigendum 2 to International Standard ISO/IEC 12087-5:1998 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 24, *Computer graphics and image processing*.

Page 39, Table 4

The calculation for total length of Block Mask Records in these two fields is only correct for IMODE S. The calculation for IMODEs B, P and R is missing.

For Field BMRLNTH, replace the third sentence with the following:

> "For IMODEs B, P and R the total length of the Block Mask Records is equal to BMRLNTH x NBPR x NBPC .
> For IMODE S the total length of the Block Mask Records is equal to BMRLNTH x NBPR x NBPC x NBANDS.

ICS 35.140 **Ref. No. ISO/IEC 12087-5:1998/Cor.2:2002(E)**

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For Field TMRLNTH, replace the third sentence with the following:

> For IMODEs B, P and R the total length of the Block Mask Records is equal to TMRLNTH x NBPR x NBPC.
> For IMODE S the total length of the Block Mask Records is equal to TMRLNTH x NBPR x NBPC x NBANDS.

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INTERNATIONAL STANDARD ISO/IEC 12087-5:1998
TECHNICAL CORRIGENDUM 1

Published 2001-05-15

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Information technology — Computer graphics and image processing — Image Processing and Interchange (IPI) — Functional specification —

Part 5:
Basic Image Interchange Format (BIIF)

TECHNICAL CORRIGENDUM 1

Technologies de l'information — Infographie et traitement de l'image — Spécification fonctionnelle pour le traitement de l'image et l'échange (IPI) —

Partie 5: Format d'échange de l'image de base (BIIF)

RECTIFICATIF TECHNIQUE 1

Technical Corrigendum 1 to International Standard ISO/IEC 12087-5:1998 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 24, *Computer graphics and image processing*.

Throughout the document

Change all occurrences in the document of "proforma" with "*pro forma*".

Change the spelling of the word "color" to "colour".

ICS 35.140 **Ref. No. ISO/IEC 12087-5:1998/Cor.1:2001(E)**

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Page 1, clause 1

Replace the first paragraph, last sentence with

"Annex C contains a Model Profile of BIIF in tables to assist in profile development."

In the second paragraph, delete the following (last) sentence:

"It is intended that profiles of the BIIF will be established as an International Standardised Profile (ISP) through the normal ISO processes (ISO/IEC TR 10000)."

Page 5, definition 3.1.13

Replace the term "DES" with "Data Extension Segment".

Page 6, definition 3.1.25

Replace the Profile definition with the following:

"**3.1.25**
Profile
Definition 1: An instance of a *pro forma* that contains a set of one or more base standards, and where applicable, the identification of chosen classes, subsets, options, and parameters of those base standards, necessary for accomplishing a particular function. For example: BIIF Profiles are used for specific communities such as the Open Skies community. TFS Profiles provide interoperability by specifying constraints on the TFS.

Definition 2: A member of the TFS Transport which contains PIKS Data or other image-related object data called Transport Profile. For example: Each Transport Profile contains metadata and security about the objects it contains. Whenever profile is used in the sense of definition 2, the word Transport will always precede it."

Page 6, definition 3.1.26

Replace the Profile Variant definition with

"**3.1.26**
Profile Variant
A field within this basic standard that is allowed to be defined by a BIIF profile for its structure and intent (content). An element or an attribute that is allowed to differ between BIIF profiles."

Page 6, definition 3.1.28

Replace the term "RES" with "Reserved Extension Segment".

Page 6, definition 3.1.35

Remove "(TRE)" from the term.

Page 6, definition 3.1.36

In the definition change "TFSs" to "Transportable File Structures".

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Page 7, subclause 3.2

Add the following abbreviation:

"UTF-1 UCS Transformation Format 1"

Page 9, subclause 4.1.1.2

In the fourth sentence, change "Reserved Extension Segments (RES) (see Subclause 4.2.9)." to "Reserved Extension Segments (RES) (see Subclause 4.2.8.4)."

Page 10, subclause 4.1.1.5

Replace the second sentence with

"It allows a user application to quickly identify the degree of complexity of the number and combinations of BIIF features used in any specific BIIF file within this given BIIF profile."

Replace the last sentence with

"A Model BIIF profile file marked at complexity level 02 may have up to 20 image segments, 100 symbol segments, 10 text segments and 20 data extension segments."

Page 10, subclause 4.1.2

Replace the last sentence with

"This standard also promotes a higher degree of interoperability among two or more diverse communities of interest through the selection of a common set of functionality captured in specific BIIF profiles and implementation agreements."

Page 11, subclause 4.1.3.1

Replace with the following:

"All header and subheader fields contained in the BIIF file shall contain valid data (that is, data in accordance with the restrictions specified for the contents of the field in this document or as constrained by an applicable BIIF profile definition; Annex C) or the specified default value."

Page 11, subclause 4.1.3.3.1

Remove the fourth sentence:

"This character set is selected from ISO/IEC 646."

Replace last sentence with

"Valid BCS character codes range from 20 through 7E and line feed (0A), form feed (0C), and carriage return (0D)."

Page 11, subclause 4.1.3.3.4

Replace the third sentence with

"The BIIF profile shall identify the adopted form, the adopted implementation level and the adopted subset (list of collections and/or characters) in accordance with the structures defined in ISO/IEC 10646."

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Page 14, subclause 4.1.5.3

Replace the second sentence with

"The lower and right boundaries constraints are defined as one of the key attributes of the complexity level definition in a BIIF profile."

Page 15, Figure 5

Change column value of K. Arrow 3 from "00050" to "-0005"

Page 16, subclause 4.2

In the third sentence, change "…or UTF-8." to "…or UCS (when UTF-8 encoded)."

Page 17, subclause 4.2.2

Change Column III type PVV, first sentence to

"PVV: Profile Variant-Value: A restriction on value."

Change Column III type PVV, last sentence to

"The BIIF profile is required to identify constraints on the data value range."

Change Column III type PVU, second sentence to

"Both structure (syntax) and meaning are allowed to be defined by the BIIF profile;"

Page 26, subclause 4.2.4.1

Replace the second to the last sentence with

"The NBPP field has a value in the range 0-96 bits unless constrained by the BIIF profile."

Page 30, Table 3

ICOM1 Field, Description column, change "BCS-A" to "UTF-8".

Page 31, Table 3

XBANDS Field, Description column, replace the first sentence with

"When NBANDS contains the value 0, this field shall be present and contain the number of bands comprising the multi-spectral images with greater than 9 bands."

Page 34, Table 3

Image subheader, fields NPPBH and NPPBV

Change the value range for both NPPBH and NPPBV to

"0000"-"9999"

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Image Subheader, NPPBH field

Add the following to the NPPBH field description

"When NBPR is "0001", setting the NPPBH value to "0000" designates that the number of pixels horizontally is specified by the value in NCOLS."

Image Subheader, NPPBV field

Add the following to the NPPBV field description

"When NBPC is "0001", setting the NPPBV value to "0000" designates that the number of pixels vertically is specified by the value in NROWS."

Page 38, subclause 4.2.5.2.2

Remove the last sentence:

"Consequently, the value used for pad pixels in a masked image shall not appear within the bounds of significant pixel values of the image."

Page 42, subclause 4.2.5.3

Replace the first sentence with

"The format of the image data placed in the image data field after compression is provided with the description of BIIF image compression algorithms in the appropriate Standards Documents selected by the BIIF profile (see Clause 2)."

Page 48, subclause 4.2.6.2

Replace the fifth sentence with

"The format of the symbol data field content is specified by the BIIF profile."

Page 50, subclause 4.2.7.2

Replace the last two sentences with

"The BIIF profile identifies the allowed text format codes to be used. Additional codes may be defined by profile to specify formatted text."

Page 54, Table 10

Change DESCLAS field name in Table 10 from "DESCLAS" to "DESSEC".

Page 55, Table 11

Change DESCLAS field name in Table 11 from "DESCLAS" to "DESSEC".

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Page 58, clause 5

Replace the first two sentences with

"ISO/IEC 12087-5 (BIIF) utilizes the concept of conformance profiles as established by ISO/IEC 12087-1 and the registration of profiles as established by ISO/IEC 9973. Registering a new profile is the standardized means for tailoring BIIF for use by communities of interest that have different functional scopes in order to suit a variety of user requirements."

Replace the fourth sentence with

"The BIIF profiling approach allows specification of a hierarchical (nested) set of implementation variables (complexity levels) within a specific profile."

Page 58, subclause 5.1

Change the subclause title to:

"5.1 BIIF profiles"

Replace the first two sentences with

"A means for profiling is provided as a normative annex to this standard (Annex C). This annex consists of a set of *pro forma* tables to be used as templates for specifying BIIF profiles."

Replace the first paragraph, last sentence with

"A representative use of the *pro forma* is shown as the Model Profile of BIIF."

Replace the second paragraph, first sentence with

"New BIIF profiles nominated for registration can be developed by completing the *pro forma* in normative Annex C."

Replace the second paragraph, third sentence with

"Inclusion of the Model Profile in other BIIF profiles promotes an increased potential for a basic level of interoperability and data portability among implementations of differing BIIF profiles."

Replace the third paragraph, first sentence with

"When developing a new BIIF profile for a specific application domain, the Model Profile, existing profiles, and referenced content profiles (such as those for PIKS, CGM, JPEG, etc.) should be examined to determine if these meet the requirements for the targeted application domain."

Replace the third paragraph, last sentence with

"The Model Profile may be used as the starting point for the new BIIF profile, or other profiles that have been developed for communities with similar interests may be used."

Page 58, subclause 5.2

Change subclause title to:

"5.2 BIIF profile specific header/subheader dependencies *pro forma*"

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Replace the last sentence with

"A completed *pro forma*, once validated and approved by the registration authority, becomes the definition of profile specific constraints to be used by implementers of the BIIF profile."

Page 58, subclause 5.3

Replace the first paragraph, first sentence with

"Complexity levels within a functional BIIF profile provide a means to define a set of nested features and constraints within a specific profile."

Page 59, subclause 5.6

Change heading to:

"5.6 BIIF profile registration"

Replace the second paragraph, first sentence with

"BIIF profiles may reference standardized portions of the standard, registered extensions of the standard, or other ISO standards and ISPs."

In the third paragraph, replace

"The registration process for ISPs generally involves the following steps as detailed in ISO/IEC TR10000-1:

a) Develop the profile per the Model Profile

b) Submit the profile to the Registration Authority

c) Review of the profile by the Registration Authority

d) If the Registration Authority approves, skip to step f

e) If the Registration authority makes a request for revision, return to step a

f) International ballot of profile

g) If there is International approval, the profile becomes available from ISO & Registration Authority

h) If there is International denial, return to step a."

with

"The registration process for profiles is detailed in *ISO/IEC 9973: Information technology — Computer graphics and image processing — Procedures for registration of graphical items; Amendment 1, 1998-04-03"*

Page 89, subclause C.2.1

Change subclause title to

"C.2.1 Use of the model BIIF profile"

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Replace the first paragraph, second sentence with

"As indicated in subclauses below, the BIIF profile designer may elect to accept the Model Profile value for each part and field simply by indicating "Same as Model Profile" in the appropriate column."

Page 89, subclause C.2.2

Replace Rule 2 with

"R2 The BIIF profile definition may constrain allowable field entries to further define the allowable syntax in a manner similar to that of the date and time fields, e.g. CCYYMMDDhhmmss."

Replace Rule 3 with

"R3 The BIIF profile definition may define sub-fields. The definition shall be done in a similar manner as to that used in Clause 4 for defining fields in this standard. A separately documented definition may be referenced in the *pro forma* and attached to the *pro forma*."

Replace the first sentence, Rule 4 with

"R4 The BIIF profile definition for security-related fields shall be identical for all header and subheaders (i.e., FSEC, ISCSEC, SSSEC, TSSEC, etc.)."

Replace the first sentence, Rule 5 with

"R5 The BIIF profile may indicate a numeric value range for the field in the form of Minimum-value - Maximum-value (inclusive) specification."

Replace the first sentence, Rule 9 with

"R9 For PVV designated fields, the BIIF profile definer may indicate the value constraint on the field as follows:"

Page 90, subclause C.2.2

Replace the first sentence, Rule 10 with

"R10 For PVU designated fields, the BIIF profile definer is required to provide a complete discussion of the field use, including the following points:"

Page 91, subclause C.2.2.1

Change subclause title to

"C.2.2.1 BIIF Profile Tables"

Page 112, Table C.7

Fill in the Value Range Specification Column Field TRETAG with

"Any BCS-A 6 byte unique registered string

Fill in the Value Range Specification Column Field TREL with

"00001" – "99985"

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Fill in the Value Range Specification Column Field TREDATA with

"For PUBLIC Tagged Record Extensions defined through registration process. For PRIVATE TREs User Defined."

Pages 118-121, Table C.9

Rows 17 through 25, Row 29 and Row 31

Column 2 (TFS Command or Specification), and Column 3 (BIIF TFS Model Profile)

Change all references of "PROFILE" to "TRANSPORT PROFILE" and all references of "Profile" to "Transport Profile".

Page 149, subclause E.3

Replace the fourth sentence with

"The examples in this BIIF profile demonstrate how BIIF can be used for Video Frames, Infrared, and Synthetic Aperture Radar (SAR) Imagery."

Page 156, subclause E.3.4

Replace the TSSEC definition with

"*TSSEC*
This field contains the BIIF profile specific information for the text product security and is defined in the profile."

Replace the second sentence of the TXSHDL definition with

"TXSHDL
A value of zero shall mean that no BIIF profile defined tagged record extensions are included in the text subheader."

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